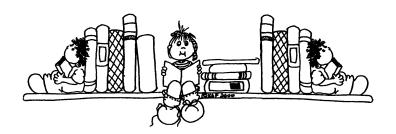
# Archdiocese of Hartford Early Childhood Curriculum Standards

Archdiocese of Hartford
Office of Education, Evangelization and Catechesis
467 Bloomfield Avenue
Bloomfield, CT 06002







# OFFICE OF CATHOLIC SCHOOLS ARCHDIOCESE OF HARTFORD

467 BLOOMFIELD AVENUE-BLOOMFIELD, CONNECTICUT 06002 TEL. (860) 242-4362 • FAX (860) 242-8683 www.catholicschoolshanford.org

Superintendent of Catholic Schools

Fall 2011

#### Dear Catholic School Educators:

It is with great pleasure that I approve the *Archdiocesan Early Childhood Curriculum Standards* for pre-kindergarten and kindergarten age children. These standards are essential for students to achieve learning expectations. It is my hope that schools with early childhood programs will implement these standards, promote the critical developmental skills vital at this level, and also educate our students by informing, forming, and transforming them with wonder and meaning of Christian faith.

You, the educators, must address academic standards through traditional and innovative methods, infused with an appreciation of Catholic doctrine, Catholic social teachings, and moral development. The 2011 early childhood curriculum standards affirm the vision statement that:

- Provide a safe, nurturing and secure environment in which students encounter the living God, who in Jesus Christ, reveals His transforming love and truth;
- Partner with parents to support students in their learning and in their search for knowledge, meaning, and truth;
- Create a Catholic climate that contributes to the formation of students as active participants in the parish community;
- Foster a culture of educational excellence through critical thinking skills, innovative and rigorous curriculum standards, a global perspective, and an emphasis on moral education, community, and service;
- Promote life-long learning that advances the development of the whole person mind, body, and soul; and
- Graduate students prepared to become productive, virtuous citizens and church leaders who will fashion a more humane and just world.

I am grateful to Mrs. Valerie Mara, Assistant Superintendent of Academics, and the Curriculum Commission for their energy, creativity, and dedication to this document. Please embrace this initiative as an opportunity to provide quality Catholic education; and to be an integral part of the effort to promote the success of all Archdiocesan school students to grow and learn in a faith-based early childhood program that enriches the whole child.

God bless you in your ministry of Catholic education.

Gratefully,

Dale R. Hoyt Superintendent of Catholic Schools Archdiocese of Hartford

Catholic Schools - Education for a Lifetime

## Purpose and Vision for Catholic School Education

Catholic Schools in the Archdiocese of Hartford welcome students of all faiths, ethnic groups and socio-economic backgrounds. The fundamental purpose of Catholic schools is to:

- Provide a safe, nurturing and secure environment in which students encounter the living God, who in Jesus Christ, reveals His transforming love and truth;
- Partner with parents to support students in their learning and in their search for knowledge, meaning, and truth;
- Create a Catholic climate that contributes to the **formation of students** as active participants in the parish community;
- Foster a culture of educational excellence through critical thinking skills, innovative and rigorous curriculum standards, a global perspective, and an emphasis on moral education, community, and service;
- Promote life-long learning that advances the **development of the** whole person mind, body, and soul; and
- Graduate students prepared to become **productive**, **virtuous citizens and church leaders** who will fashion a more humane and just world.

# **Table of Contents:**

Acknowledgements	5
Standards of a Quality Catholic Early Childhood Program	6
KINDERGARTEN	
Religion	24
Literacy Development	31
Mathematical Thinking	42
Science	50
Social Studies	60
Arts & Movement Benchmarks	74
AGES FOUR AND THREE	
Religion	77
The Child at Age Four-Literacy Development	83
The Child at Age Three-Literacy Development	89
Mathematical Thinking	93
The Child at Age Four-Mathematical Development	94
The Child at Age Three-Mathematical Development	108
The Child at Age Four-Science	119
The Child at Age Four-Social Studies	128
The Child at Age Three-Science	138
Arts & Movement Benchmarks	146
CURRICULUM RESOURCES	148

# **Acknowledgements:**

Sincere gratitude is extended to the Early Childhood members of the Archdiocesan Curriculum Commission for the time, care, and effort they dedicated to the revisions and designing of this document. Special thanks go to Lydia Forgetta-Sheffield and Bryan Cosham for their enthusiasm and energy in chairing this subcommittee. We are appreciative of all members' love of children and the concern for the early childhood education in the Archdiocese of Hartford, for helping the young child know him/herself, develop his/her talents and come to a loving God.

#### **Early Childhood Commission Members:**

Lydia Forgetta-Sheffield, Our Lady of Mercy, Madison
Bryan Cosham, St. Mary School, Newington
Pam Lupo, St. Bridget School, Cheshire
Judy Rowinski, St. Bridget School, Cheshire
Deborah Pisciotti, St. Francis School, Naugatuck
Susan DiGangi, St. Anthony School, Bristol



## Standards of a Quality Catholic Early Childhood Program

The Early Childhood Educational Standards for the Archdiocese of Hartford is aligned with the State of Connecticut Preschool Assessment Frameworks, the National Association for the Education of Young Children Early Learning Standards, and the New England Association of Schools and Colleges Preschool Standards.

As Catholic early childhood educators, we minister to the whole child – mind, heart and hands. In a trusting Catholic environment, we enable the child to grow spiritually, emotionally, socially, physically, and intellectually. Awakening the child's innate desire to learn, we foster creativity and excitement about learning by facilitating a stimulating environment. We understand each child's uniqueness in personality and learning styles. We create for the early learner opportunities to discover, explore, question, and succeed, thus providing the proper environment which enables the child freedom of choice. Above all, our setting nurtures the child's spiritual relationship with God and caring attitude for others.

#### **GOALS OF EARLY CHILDHOOD PROGRAMS**

- FACILITATE opportunities in spiritual, physical, social, cognitive, language, and aesthetic development
- CREATE an atmosphere where children appreciate a quiet time preparing them to begin a friendship with God
- INITIATE in the early learner the sacredness of life
- NURTURE a warm, caring environment that develops self-esteem and a positive attitude toward learning

Keeping in mind the cognitive and psychomotor characteristics of the child's life, care should be taken not to over-emphasize the mastery of subject matter to the detriment of the child's personal, social, and emotional growth. Curricula design of a pre-kindergarten program must be a synthesis of opportunities that build a foundation for future learning.

#### The Early Childhood Educator

An effective Catholic early childhood educator has the educational qualifications, the knowledge and commitment to both faith and early childhood education necessary to promote children's learning and development and to support families' diverse needs and interests.

The teacher awakens a sense of joy and wonder in each child. He/she cultivates in the young learner a desire for knowledge and the freedom of creative expression.

The effective early childhood teacher:

- Views every child as a child of God with a unique personality
- Respects each child's gifts and allows each child to develop at his/her own pace by providing a myriad of experiences and activities
- Integrates the curriculum with projects, learning centers, and multi-sensory activities that reflect the child's interests and differentiates instruction to accommodate individual learning styles and abilities
- Plans programs that help the child develop concepts and skills necessary to live in today's media saturated world
- Encourages each child's development of self esteem and respect for others as a basis for knowledge, responsibility, cooperation, and the blossoming of the child's creative potential
- Encourages children to work together in small groups
- Uses PLAY as a teaching and learning strategy which reinforces for the child a desire to be an integral part of his/her own world of relationships and cognitive development
- Sets clear behavioral limits in a positive, loving, manner
- Views parents as partners and encourages their involvement
- Designs and implements learning experiences and uses strategies that acknowledge each child as competent

#### Relationships

Effective Catholic early childhood programs foster each child's personal relationship with God. It promotes positive relationships among all children and adults encouraging each child's sense of individual worth and his or her sense of belonging to a community. Furthermore, it fosters each child's ability to contribute as a responsible community member. (NAEYC)

The early childhood teacher provides experiences for the young child that:

- Strengthen the child's sense of prayer through reverence for God's creation
- Provide multi-sensory experiences for the young child to discover the mysteries of nature, culminating in a respect for life
- Build a sense of trust with the young child by permeating the pre-school environment with warmth and sincerity
- Develop play and work situations where the young child is kind to his/her peers and respects personal property and community property
- Cultivate opportunities to develop the Gospel value of justice by caring for each other
- Empowers the child to be sensitive and aware of the diversity among them and to respect differences in skills, talents, interests, race, color, and gender
- Inculcate within the young child a sense of integrity
- Foster occasions for the child to think critically and to solve problems without direct adult intervention
- Encourage an atmosphere of loving concern to enhance independence and cooperation

#### **TEACHING STRATEGIES**

An effective early childhood program uses developmentally, culturally, and linguistically appropriate and effective teaching approaches that enhance each child's learning and development in the context of the program's curriculum goals.

To achieve this, the teacher must pay special attention to the developmental level of the child. Teachers of three, four, and five-year-olds must realize that the physical and psychological development of each child is different. The following charts are provided to validate the philosophy that before a child can move onto the next phase of development, specific tasks must be mastered. These guidelines facilitate the preschool teacher's response to the uniqueness of each child in order to aid the child's growth toward Catholic and academic maturity.

#### THE CHILD AT AGE THREE

Physical Growth:  Motor Development	<ul> <li>The child at three:</li> <li>Stretches and moves frequently</li> <li>Strengthens use of hand skills through building with materials</li> <li>Feeds self with little or no help</li> <li>Manages front buttons</li> <li>Enjoys use of complex toys</li> <li>Accomplishes self-care activities with minimal difficulty</li> <li>Climbs and runs with skill</li> <li>Eager to assist in household tasks</li> </ul>
Social-Emotional Growth:  Development of self-concept, concept of others and of the world	<ul> <li>Needs to be valued as an individual</li> <li>Is sensitive to other's actions, attitudes, and feelings</li> <li>Shows natural inclinations to understand the environment</li> <li>Is self-centered</li> <li>Is agreeable, wants to please</li> <li>Asserts independence</li> <li>Conforms to requests</li> <li>Develops concepts through role playing</li> <li>Participates in group play</li> <li>Desires to experience success</li> <li>Acts and reacts on the feeling level; laughs, claps hands, jumps</li> <li>Responds to adult enthusiasm or sympathy</li> </ul>

	<ul> <li>Enjoys being with other children, but still likes to play alone</li> <li>Grows in self-worth when offered words of genuine praise</li> <li>Requires enough freedom to achieve a measure of independence; benefits from free time with tools such as sand, stack toys, and crayons</li> </ul>
Intellectual Growth	The child at three:
	<ul> <li>Does not understand symbolism (A fish is a fish, not a symbol for Christianity.)</li> <li>Speaks in short sentences</li> <li>Makes and understands pertinent comments</li> <li>Shows marked growth in language development – 750 word vocabulary</li> <li>Limited attention span</li> <li>Enjoys simple stories; wants them retold with the same sequence, same words and same inflections</li> <li>Practices conversational skills</li> <li>Needs to build a background of experience by seeing and often touching lesson-related pictures and objects</li> <li>May have difficulty in understanding directions, requires one brief direction at a time</li> </ul>
Religious Development	<ul> <li>Understands God's love demonstrated better than God's word explained</li> <li>Needs to develop healthy self- esteem</li> <li>Shows an openness to reverence for religion as seen in the home</li> <li>Needs to establish a trusting relationship with God as a loving person</li> <li>Is trusting and ready to accept what is told about God</li> <li>Is capable of believing that God loves each person</li> <li>Is sensitive to attitudes of prayer</li> <li>Delights in simple, spontaneous prayer; lacks understanding of formal prayer</li> <li>Views the teacher as representing God's love</li> <li>Observes and imitates adult actions toward others</li> <li>Views school as a place where children are wanted and loved.</li> </ul>

Note: Around three and a half, many children change dramatically. Referring to the following developmental summary for four-year-olds may be helpful in understanding mature threes.

## THE CHILD AT AGE FOUR

	T	
Physical Growth:	The child at four:	
Motor Development	<ul> <li>Is active – needs activity</li> <li>Is incapable of sitting still for any length of time unless highly motivated</li> <li>Hops, gallops, skips</li> <li>Hits; kicks</li> <li>Is interested in manipulative materials</li> <li>Has fair control at easel</li> <li>Is an expert in the use of wheel toys (tricycles, wagons, etc.)</li> </ul>	
Social-Emotional Growth:	The child at four:	
Development of self—concept, concept of others and of the world	<ul> <li>Tests the world</li> <li>Is self-dependent in routines</li> <li>Can be assertively confident of abilities</li> <li>Craves companionship of peers</li> <li>Resists regulations and suggestions that limit freedom; throws fits of rage</li> <li>Begins to see wisdom of rules</li> <li>Likes to make choices</li> <li>Likes group work and planned experiences</li> <li>Usually radiates good fellowship</li> <li>Is less sensitive, less vulnerable, less demanding with other children than at age three</li> <li>Has a broad sense of humor</li> <li>Argues with parent or caregiver</li> <li>Is sensitive to the feelings and attitudes of familiar adults</li> <li>Shows a growing interest in doing things with other children</li> <li>Desires the experience of working in small groups</li> </ul>	
Intellectual Growth	<ul> <li>Has a strong desire to learn</li> <li>Is eager for intellectual manipulatives (puzzles, jokes, etc)</li> <li>Perceives analogies</li> <li>Is imaginative</li> <li>Displays an active tendency to conceptualize</li> <li>Demonstrates high verbal aggression and generalizes – 1500 word vocabulary</li> <li>Has limited verbal expression of experiences</li> </ul>	

	<ul> <li>Uses "and" frequently</li> <li>Learns name and address</li> <li>Is not always able to make adequate judgments for personal safety (for example, may not realize glass can break and cut)</li> <li>Extends perceptual ability; artwork becomes more detailed</li> </ul>
Religious Development	The child at four:
	<ul> <li>Is capable of beginning to understand God's love by experiencing human love</li> <li>Needs to have demonstrated that God made each child unique and special</li> <li>Knows that praying is talking to God and that people can use their own words when praying</li> <li>Observes how religious matters are handled by adults</li> <li>Wants to have questions about God answered truthfully and concisely</li> <li>Desires to do friendly things for others as part of God's community</li> <li>Radiates when recognized for acts of kindness</li> <li>Needs to have positive successful religious experiences</li> <li>Can be spiritually damaged if God is used by adults as a means of correction or control</li> </ul>

## THE CHILD AT AGE FIVE AND SIX

Physical Growth:	The child at five and six:
Motor Development  Coordinates more complex movements with increasing control, balance and accuracy using opposing hand movements to manipulate materials including cutting and drawing with control	<ul> <li>Hops on one foot</li> <li>Moves to catch a ball, but may still trap it against body rather than with hands</li> <li>Throws ball overhand</li> <li>Is physically active</li> <li>Is capable of sitting for longer periods of time</li> <li>Pumps on a swing</li> <li>Constructs patterns with small mosaic block, paper shapes and stripes</li> <li>Holds pencil with standard grip to draw objects and shapes with control and accuracy (circles, squares, and letters</li> <li>Cuts out form/shape with straight and curved lines</li> </ul>

## **Growth in Self-Reliance** The child at five and six: Practices personal hygiene and Manages all aspects of dressing, eating, and toileting independently self-help skills Practices personal hygiene Develops table manners The child at five and six: Social-Emotional Growth: Development of self—concept, Independently selects and participates in a wide variety of activities concept of others and of the Requests additional material to extend work world Actively experiments, often without need for encouragement Persists with both self-selected and teacher directed tasks until the task is completed Stays with task or activity that may take several sessions to complete Returns to activity after a break or interruption Actively participates in whole group activities and usually waits his/her turn Usually listens attentively, waits turn, and responds appropriately to teacher directions Anticipates transitions and usually follows routines and rules independently Anticipate and verbalizes routines and rules Describes consequences of breaking rules Independently identifies own feeling related to a cause using words Understands when others' needs are different from own Able to take other's point of view Sustains cooperative activities with a range of children Enters work/play situation and participates cooperatively in sustained activity with a variety of peers Negotiates by making and accepting suggestions for play or work Usually takes turns in play Begins to solve conflicts directly with peers using appropriate strategies Independently attempts to solve conflicts with peers by offering solutions and by trying appropriate strategies before seeking teacher's help

Accepts reasonable compromise

	<ul> <li>Demonstrates respect for differences among others and plays with a variety of peers regardless of gender, race or ability</li> <li>Chooses to interact with a variety of children</li> <li>Shows positive feelings toward differences</li> <li>Needs affirmation and individual attention</li> <li>Prefers associative play in small groups</li> <li>Feels socialized pride in clothes and accomplishments</li> <li>Wants to do things others do</li> <li>Shows a sense of humor; enjoys tricks, jokes</li> <li>Has good social relationships with parents or chief care givers</li> <li>Is capable of sitting in group situation</li> <li>Is developing a social conscience</li> <li>Seeks affection from other children and adults</li> <li>Wants to establish a good relationship with teacher</li> <li>Demonstrates considerable freedom in choosing friends</li> <li>May be hurt by being compared with other children</li> </ul>	
	• Way be fluit by being compared with other children	
Intellectual Growth	The child at five and six:	
	<ul> <li>Is curious and eager to learn</li> <li>Talks without infantile articulation-5000 word vocabulary</li> <li>Narrates a long tale</li> <li>Has increased attention span</li> <li>Is eager to listen to stories</li> <li>Is capable of attentive listening and can carry out instructions</li> <li>Enjoys activities that allow an exchange of ideas among peers</li> <li>Is able to plan and work on simple projects</li> </ul>	
Spiritual Development	The child at five and six:	
	<ul> <li>Is growing in the knowledge of own self-worth and ability</li> <li>Knows God made and loves him/her</li> <li>Is capable of knowing God is interested in everyday experiences</li> <li>Needs to experience and associate God with positive, joyful occasions</li> <li>Articulates that God not only loves him/her, but wants that love shared with others</li> <li>Shows verbally and nonverbally, that the most effective example of God's love is a loving, concerned adult</li> <li>Is conscious of adult feelings when they talk about God</li> </ul>	

<ul> <li>Understand that he/she is a member of a school community and he/she will be missed when not present</li> <li>Understands that he/she is part of a home, school, parish, and world community</li> <li>Is developing a sense of him/herself as a caretaker of God's creation</li> </ul>
<ul> <li>Is developing the ability to pray simple prayers and express gratitude and praise to and love for God</li> </ul>
<ul> <li>Is developing a sense of him/herself as a peacemaker</li> </ul>

#### The teacher will incorporate into her/his daily schedule the following teaching strategies:

#### **BE MIND-FULL**

The teacher will:

- Follow a planned daily schedule that provides opportunities to develop positive social skills.
- Set goals for each child that integrate various learning styles.
- Provide experiences for decision-making and critical thinking.

#### **BE HEART-WARMING**

The teacher will:

- Nurture each child
- Establish a positive learning environment that promotes self-respect and respect for others.

#### **PROVIDE HANDS-FULL**

The teacher will:

• Provide learning experiences through a myriad of activities:

#### SPIRITUAL DEVELOPMENT

Religious activities, which include music, art, literature

#### PHYSICAL DEVELOPMENT

- Table, sand and water activities
- Creative expression
- Block and woodworking
- Large motor activities
- Art and movement activities

#### LANGUAGE DEVELOPMENT

- Reading and listening (using traditional books and equipment or technology)
- Finger plays
- Puppetry
- Music
- Creative dramatics

#### **SOCIAL DEVELOPMENT**

 Games which include dramatic play, board games, computer or electronic games, and physical play

#### COGNITIVE DEVELOPMENT

- Cooking activities
- Manipulative math experiences
- Science
- Critical thinking
- Problem solving
- Software that supports critical thinking and problem solving

Within the schools of the Archdiocese of Hartford, a variety of early childhood models exist. Some schools accept children before their third birthday. Some schools have full day programs in Pre-K and some have partial day programs. Almost all schools have full day kindergarten programs. However, in all early childhood classrooms, the developmental level of children must be recognized and reverenced. To achieve this, the teacher must pay special attention to the maturity and growth of each child. With that in mind, teachers and administrators must understand that the standards and performance skills listed in this document are those that children may achieve by the end of their Pre-K 3, Pre-K 4 and Kindergarten experiences. The chronological birthday and developmental level of the child must always be considered in evaluating performance standards. Teachers and parents should realize that performance standards are the building blocks of early childhood education.

"Children have real understanding only of that which they invent themselves, and each time that we try to teach them something too quickly, we keep them from re-inventing it themselves."

Jean Piaget

#### PHYSICAL LEARNING ENVIRONMENT

An effective early childhood program provides appropriate and well-maintained indoor and outdoor physical environments, including facilities, equipment, and materials to facilitate child and staff learning and development. To this end, a program structures a safe and healthful environment. Successful early childhood teachers understand that the learning environment should contribute to a sense of wellbeing and security for children. An effective learning environment is another teacher, igniting social, affective, and cognitive learning because of its power to organize, provide a myriad of experiences, and promote choices in daily activities. In the words of Lelia Gardini, the early childhood classroom environment is "an aquarium that mirrors the ideas, values, attitudes, and cultures of the children within it."

The physical setting of the classroom should:

- Be warm and inviting
- Stimulate the child's intellect
- Awaken the child's curiosity
- Promote critical thinking skills
- Energize creative expression
- Promote independence
- Foster decision making
- Welcome and encourage cooperation

#### **REGULATIONS AND RECOMMENDATIONS:**

#### **REGULATIONS**

Local fire, building and town Health Department officials must be contacted to obtain local codes. Local codes must be followed to insure the health and safety of each child.

#### **RECOMMENDATIONS**

#### A. INDOOR

- Sufficient indoor space must be provided for active and quiet play. Generally the space, based on the number of children, is one child for every 35 to 50 square feet of indoor space.
- 2. An in-classroom bathroom facility is **strongly recommended** for this age group. If this is not possible, a bathroom should be located on the same floor within close proximity to the classroom. In the latter setting an adult must always accompany a child to the bathroom.
- 3. The room should be furnished with appropriate sized chairs and tables.

- 4. Developmentally appropriate play materials and manipulatives should be provided in the learning centers.
- 5. Play materials which encourage imagination and self-expression should be provided.

#### B. MATERIALS FOR LEARNING CENTERS

(Please note that in the choice of any games and materials, it is important to remember the developmental level of the children in the program. Small objects can be a swallowed by three-year olds.)

#### ▲ INVITATIONS TO COMPLEX LEARNING:

Set up materials in a way to invite complex and creative usage. For example, a set of blocks in a basket with some small mirrors, some pieces of graphing paper and felt pens may stretch the child's ability for creating symmetrical designs, drawing patterns, and sorting and classifying objects.

1. Materials to aid the early learner to make	2. Manipulatives for early learner's small muscle	
choices:	development and eye-hand coordination:	
<ul> <li>stacking shapes</li> <li>matching games</li> <li>sorting games and puzzles</li> <li>shape games</li> <li>color games</li> <li>comparative size games</li> <li>seriatim games and puzzles</li> <li>things to compare</li> <li>things that are alike</li> <li>things that are different</li> <li>things that are hard, soft, big, little, smooth, rough, bumpy, sticky, stretchy, shiny, cold, warm, thick, thin</li> <li>computer games</li> </ul>	<ul> <li>inset puzzles</li> <li>jigsaw puzzles</li> <li>paper and crayons</li> <li>scissors</li> <li>snap boards</li> <li>lacing boards</li> <li>nuts and bolts</li> <li>locks and keys</li> <li>beads and strings</li> <li>Lego blocks</li> <li>tinker toys</li> <li>turn-a-gears</li> <li>jumbo beads</li> <li>pegs and peg boards (large)</li> <li>magnetic shapes</li> </ul>	
Materials for sensory and tactile awareness:	4. Imaginative thinking materials:	
<ul> <li>plasticine</li> <li>modeling clay</li> <li>play dough</li> <li>wet sand</li> <li>paints</li> <li>finger paints</li> </ul>	<ul> <li>large blocks</li> <li>cars</li> <li>trucks</li> <li>animals</li> <li>people</li> <li>signs</li> </ul>	

<ul><li>5. Science and scientific tools for early learners:</li><li>magnifying glass</li></ul>	6. Materials for natural science to motivate the early learner to question and explore:
• magnets	• plants
kaleidoscope	• pets
toy compass	• flowers
outdoor thermometer	• nuts
<ul><li>prisms</li></ul>	• foods
light table	<ul><li>insects</li></ul>
<ul> <li>computer games</li> </ul>	• shells
microscope binocular	seed pods
<ul> <li>notebook/clipboard</li> </ul>	<ul><li>grains</li></ul>
<ul> <li>nature books</li> </ul>	<ul><li>pebbles</li></ul>
<ul><li>rocks, shells, bones</li></ul>	• bugs
<ul><li>leaves</li></ul>	<ul><li>leaves</li></ul>
• plants	<ul><li>rocks</li></ul>
	<ul><li>feathers</li></ul>
7. Materials for a woodworking center:	8. Materials for a music/art center:
<ul><li>hammer</li></ul>	<ul> <li>reprints of culturally varied artists' works</li> </ul>
<ul><li>pliers</li></ul>	on display
<ul> <li>screwdriver</li> </ul>	<ul> <li>variety of unusual papers: construction</li> </ul>
• saw	paper, wallpaper, sandpaper
<ul><li>screen</li></ul>	<ul> <li>paint brushes of all types</li> </ul>
wood box	<ul> <li>boxes for storage</li> </ul>
<ul><li>wood scraps</li></ul>	<ul><li>paint, easels</li></ul>
<ul><li>nuts/bolts</li></ul>	felt board
safety goggles	<ul> <li>junk materials: packing materials, boxes, cups, feathers, paper plates, scoops</li> </ul>
	• wind chimes
	• tambourines
	tone blocks
	rhythm sticks or blocks
	xylophone     deverage
	• drums
	maracas     cassette player CD player
	<ul><li>cassette player, CD player</li><li>bells</li></ul>
	sand blocks
	music software
Materials for a housekeeping center:	<ul><li>triangles</li><li>10. Materials for gross motor activities:</li></ul>
	_
play stove     play refrigerator	large and small balls     parachute
play refrigerator     play support	<ul><li>parachute</li><li>balance beam</li></ul>
play cupboard     play cand	<ul><li>balance beam</li><li>exercise mats</li></ul>
<ul><li>play sand</li><li>table and chairs</li></ul>	• exercise mats
table and chairs	

- tableware
- dolls
- doll bed
- telephone
- dress-up clothes (Avoid hats. Be sure all items are laundered regularly.)
- cabinets
- household items (pots, pans, dishes, cups)
- recipe cards, cook books
- mirror
- clock
- high chair
- empty food boxes

#### 11. Materials for a math center:

- inset number blocks
- number scale
- tactile numbers
- rulers
- magnetic numerals and board
- clock
- egg timer
- balance scale
- abacus
- fractional shape puzzles
- dominoes
- measuring cups
- geometric shapes
- counting sets, counting objects
- play money
- counting cubes
- number games
- computer software

#### 13. Language and literacy:

- pillows
- rocking chairs
- appropriate sized chairs and tables
- colorful notebooks, unusually shaped pads
- rubber stamps and stamp pads
- scissors
- glue or paste
- pens, felt markers, pencils, crayons
- an old typewriter
- computer

#### 12. Math and math manipulatives:

- unique items for sorting (foreign coins, shells, tiles, rocks, jewels, buttons, colored macaroni)
- unusual containers to sort in (baskets, boxes in different sizes, trays)
- measuring devices (bathroom scale, postal scale, food scale, yardstick, folding or rectangular rulers, measuring tapes)
- non-standard measuring devices (ribbon, yarn, string, beads, unifix cubes, belts, adding machine tape)
- patterned items to explore and match (fabric, old wall paper samples, colored toothpicks, counting bears or dinosaurs, toy cars, trucks, airplanes, keys, marbles, craft pompoms, buttons and sequins)

#### 14. Materials for exploring letters and words:

- inset letter blocks
- cutout wooden letters
- plastic letters
- sandpaper letters
- alphabet lotto
- rubber stamp letters /words and pads
- beaded alphabet cards
- tape recorder and cassettes
- CD player, DVD player
- labels
- computer software

#### **CLASSROOM ENVIRONMENT:**

In planning the classroom environment, the teacher should look at the room from the child's perspective and then:

- separate noisy from quiet areas
- clearly define areas with furniture, low bulletin boards, child sized tables and chairs, low plants or changes in ground level flooring
- place materials at child's eye view, with the child's physical perspective in mind
- separate child's and teacher's materials
- provide materials for learning centers to enrich environment in language literacy, math and math manipulative, art and kinesthetic activities, and dramatic play
- allow pathways for clear travel between areas or centers

Above all, in creating the classroom environment it should be organized, neat, colorful, aesthetically pleasing, uncluttered, and comfortable.

#### C. OUTDOOR

- 1. Sufficient outdoor space must be provided for gross motor play. Generally 75 to 100 square feet of outdoor space must be available for each child.
- 2. The area should be fenced in completely and free of debris.

#### **PROVISIONS FOR REAL LIFE EXPERIENCES**

Provide experiences in the classroom that represent REAL LIFE ACTIVITIES and living things.

**Examples:** Plants, small animals, terrariums and aquariums provide opportunities to care for living things. Activities such as gardening, washing dishes, and cleaning up the dramatic play area give children a sense of competence with real tools in the world.

Materials such as clay, blocks or paints represent forms of diverse culture. Visual displays such as rocks, shells, leaves and things of nature reflect the cultures of all children and are essential to real life experiences.

#### ENCOURAGE CROSS-CURRICULAR IDEAS

Placing areas adjacent to one another may encourage cross-curricular ideas.

**Example:** The blocks adjacent to the writing center will encourage children to combine their constructive play projects with writing projects such as labeling a door in their construction. It can foster cooperative play encouraging those in the writing center to make signs or draw people for the construction.

#### **FAMILIES**

An effective early childhood program establishes and maintains collaborative relationships with each child's family to foster children's development in all settings. These relationships are sensitive to family composition, language, and culture.

#### PARTNERSHIP AND RELATIONSHIP WITH PARENTS

#### *✓* **COMMUNICATION:**

Communication is the scaffold to forming relationships with students' families. An effective early childhood program understands and values families through:

- An understanding of the socioeconomic conditions of each family
- Knowledge of each family's structure
- An appreciation of relationships within the family
- An awareness of family stresses
- A support of the language spoken in the home
- A celebration of the cultural values and ethnicity of the family
- An effective early childhood program creates respectful, reciprocal relationships
- Parents are partners in learning and should be encouraged to volunteer in appropriate classroom activities.
- Parent-teacher conferences should be scheduled at the beginning of school to discuss teacher observations of the child's growth in the program. They should be held again in the spring to discuss placement in the fall. Throughout the year, parents should be made to feel that they can conference with the teacher as needed.
- A bulletin board for parents should be visible. On this bulletin board the teacher should display the monthly calendar, a list of upcoming events for parent participation, classroom themes, snack assignments, and pictures of class and school activities.
- A monthly calendar should be published to keep parents informed about up-coming events so that parent participation will be insured.
- Parents should have a handbook that establishes the rules, regulations, and policies of the program.

#### Communities

An effective early childhood program establishes relationships with and uses the resources of the children's communities to support the achievement of program goals.

- Children of parochial schools are part of the parish and larger school communities. They should participate in prayer services and liturgies as appropriate. They should participate in service projects (cards and pictures for hospitals and nursing home, performances for senior citizens). The church should be used for instruction and prayer.
- Early childhood programs should avail themselves of all community resources. If possible, students should visit or be visited by local firemen or policemen.
- Participation in public library outreach programs is encouraged.
- Children and their families should be familiar with local health resources.

## **RELIGION – KINDERGARTEN**

#### **PROFESSION OF FAITH**

#### . CHURCH

The child will understand that at baptism they became members of the Church community and the Church calls him/her to become one in the Spirit.

"I will teach you to bring people in instead of fish. Jesus went all over Galilee, teaching and preaching the good news about God's kingdom." Matthew 4:19:22

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To discover that people make up the church family.	<ul> <li>The child will understand we become friends of Jesus through our Baptism.</li> <li>The child will recognize the Church as the family of God.</li> <li>The child will understand God created the Church out of love.</li> <li>The child will name the special people who make up our church family: the pastor, deacons, Ministers of the Eucharist; lectors; and altar servers to name a few.</li> </ul>	
В.	To describe how the church is a special place and sacred place.	● The child will participate in a tour of the church building, identifying and understanding the significance of:  □ Tabernacle □ Altar □ Baptismal Font □ Stations of the Cross □ Stained Glass Windows □ Sanctuary	
C.	To identify Baptism as the sacrament that made him/her a member of the church.	<ul> <li>The child will role-play baptism.</li> <li>The child visits the parish church and identifies the baptismal font.</li> </ul>	

#### II. Doctrine

The child will experience the doctrines of the Church through concrete experiences with many opportunities through aesthetic expression; art, music, movement, and dramatic play.

"You are God's chosen and special people. God has brought you out of darkness into his marvelous light.

Now you must tell all the wonderful things that he has done." 1 Peter 2: 9:10

STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A. To know God is the	The child will recall the story of creation.	
Creator.	The child will name all God's creations and know that	
	it was good.	
	The child will describe ways he/she uses his/her	
	senses to learn about what God made.	
	The child will describe the sun, moon, stars, and the	
	entire universe as creations of God.	

		<ul> <li>The child will classify and sort God's creation.</li> <li>The child will express his/her wonder and awe at the gift of God's creation.</li> <li>The child will describe animals as signs of God's love.</li> </ul>	
В.	To understand God made people to share in His love and that he/she is special.	<ul> <li>The child will describe him/herself as a child of God.</li> <li>The child will understand his/her own uniqueness.</li> <li>The child will understand his/her name is special and that God knows each of us by name.</li> <li>The child will appreciate his/her gifts are given by God.</li> <li>The child will explain that God made people in his image and likeness.</li> <li>The child will recognize that saints are special people who followed God's golden rule.</li> <li>The child will discuss how all of God's children are called to be saints.</li> </ul>	
C.	To know Jesus is God's own Son.	<ul> <li>The child will articulate that Jesus is the Son of God.</li> <li>The child will understand that Jesus is our brother.</li> <li>The child will tell that Jesus was born on Christmas.</li> <li>The child will retell the Christmas story.</li> </ul>	
D.	To recognize Mary as the Mother of Jesus.	<ul> <li>The child will name Mary as the Mother of Jesus, God's own Son.</li> <li>The child will recall that God calls Mary to be Jesus' mother.</li> <li>The child will recall that Mary is our mother as well as Jesus' mother.</li> <li>The child will celebrate the feast of the Immaculate Conception on December 8.</li> <li>The child will celebrate the feast of Our Lady of Guadalupe on December 12.</li> </ul>	
E.	To identify the Holy Family.	The child will identify the Holy Family as Jesus, Mary, and Joseph.	

#### **CELEBRATION OF CHRISTIAN MYSTERY**

#### III. Liturgy/Sacraments

The child will experience and celebrate through prayer and participation the liturgical and sacramental life of the Church.

"With thankful hearts offer up prayers and requests to God. Then because you belong to Christ Jesus, God will bless you with peace that no one will completely understand. And this peace will control the way you think and feel." Philippians 4:8-9

9	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To understand that as a member of the Church he/she celebrates the life of Jesus by celebrating the following liturgical feasts: Advent, Christmas, Lent, and Easter	<ul> <li>The child will understand that Advent is a time of waiting for Jesus to come.</li> <li>The child will identify the Advent wreath as a symbol of the four weeks in preparation for Christmas.</li> <li>The child will retell the Christmas story.</li> <li>The child will identify the Magi, who honored Jesus, as the Son of God and Son of Mary.</li> <li>The child will describe Lent as a time to grow in love for God and others.</li> <li>The child will explain what happened on Palm Sunday.</li> <li>The child will identify Holy Thursday, Good Friday and Holy Saturday as three special days (Triduum).</li> <li>The child will understand that God gives us symbols of new life in preparation for Easter.</li> <li>The child will understand that Easter is a time for new life bursting forth within us.</li> <li>The child will recognize Jesus rose from the dead on Easter Sunday.</li> <li>The child will identify church celebrations and feasts during the liturgical year: <ul> <li>October 12, the feast of St. Francis of Assisi</li> <li>December 6, the feast of St. Nicholas</li> <li>December 13, the feast of St. Lucy.</li> <li>February 14, the feast of St. Valentine.</li> <li>March 17, the feast of St. Patrick</li> </ul> </li> </ul>	
В.	To understand we honor Mary and celebrate special days to show our love for Mary.	The child will understand that everyone has a birthday and we celebrate Mary's birthday on September 8.	
C.	To name Baptism as a sacrament.	<ul> <li>The child will recognize the symbol for the sacrament of Baptism is water.</li> <li>The child will recall that at his/her Baptism he/she became a member of the Church.</li> </ul>	
D.	To name Reconciliation/ Penance as a sacrament.	The child will identify Reconciliation/Penance as the sacrament of peace.	
E.	To name the Eucharist as a sacrament.	The child will recall that love is the foundation for the sacrament of Eucharist.	
F.	To use prayer to develop a relationship with God.	<ul> <li>The child will make the Sign of the Cross.</li> <li>The will recite the Our Father.</li> <li>The child will recall that the Our Father is the prayer that Jesus taught us.</li> <li>The child will recite the Hail Mary.</li> <li>The child will recall the Hail Mary as a prayer that honors the Blessed Mother.</li> </ul>	

•	The child will recite the Glory Be. The child will recall the Glory Be as a prayer to the	
	Trinity.	
•	The child will know that the Our Father, Hail Mary, and	
	Glory Be are the prayers used in saying the Holy Rosary.	

#### LIFE IN CHRIST

#### IV. Scripture

The child will treasure God's word as it is integrated into daily instruction, reflection, sharing, and prayer.

"Then he opened their minds to understand the scriptures." Luke 24:27

9	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To understand the Bible tells us stories about Jesus.	Chu • The	e child will understand that the Bible is the urch's holy book. Is child will recognize we hear stories from the le at church, at school, and at home.	
В.	To recognize familiar gospel stories: the birth of Jesus; Jesus as the Good Shepherd; and the Easter Story.	• The She	e child will retell the Christmas story. e child will give examples of how Jesus is a Good epherd. e child will dramatize the Easter story.	

#### V. Morality/Family Life

The child will understand that he/she is a steward who cares for God's world. We have the responsibility to care for and to protect our planet, its people, and its resources.

"Let all who live in God's world care for it." Psalm 33:8

STUDE	NT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
his/h	nderstand Ier responsibility re for God's d.	<ul> <li>The child will list ways he/she can take care of God's world.</li> <li>The child will know when he/she cares for God's world he/she shows love for God.</li> <li>The child will make a collage showing ways he/she takes care of God's world.</li> <li>The child will make a poster showing how he/she can help for the classroom.</li> <li>The child will discuss how recycling helps the earth's resources.</li> </ul>	
famil	nderstand our ly loves and s for us.	<ul> <li>The child understands that everyone has a family.</li> <li>The child recognizes a baby is a special gift from God to a family.</li> <li>The child acts out ways families helps and cares for each other.</li> <li>The child composes a prayer thanking God for his her family.</li> </ul>	

## VI. Catholic Social Teachings

The child will be invited to become an ambassador of the GOOD NEWS by imitating Jesus, as a great role model.

"Before I formed you in your mother's body I chose you. Before you were born I set you apart to serve me."

-Jeremiah 1:5

9	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To recognize the life and dignity of others by treating others with respect and kindness because God created all people.	<ul> <li>The child will understand that we are all special.</li> <li>The child will graph ways in which we are all alike and different.</li> <li>The child will list ways in which he/she sees, hears, tastes, and thinks for himself/herself.</li> <li>The child will recognize his/her own dignity by creating a class tree listing his/her gifts.</li> </ul>	
В.	To promote justice and love by sharing his/her life with his/her family and community by giving to others and taking care of his/her neighbors.	<ul> <li>The child will identify Jesus as a friend.</li> <li>The child understands that Jesus gives us friends and family to make us happy and to help us.</li> <li>The child will reach out to members of his/her community by collecting clothes for the poor.</li> <li>The child will show concern for his/her community by collecting pennies to assist the poor.</li> <li>The child will make card a welcome card for babies baptized in the parish.</li> <li>The child will give two toys away to the poor or homeless each time he/she receives a new toy.</li> </ul>	
C.	To value the rights of others and take care of the property of others.	<ul> <li>The child will name the universal needs of all people: food, work, clothes, a home, and a school.</li> <li>The child will name the fruits of the Spirit as the virtues, recognized by all faiths and cultures of the world.</li> <li>The fruits of the Spirit are: love, joy, peace, self-control, kindness, patience, and gentleness.</li> </ul>	
D.	To acknowledge that the poor and helpless are entitled to life's necessities: food, clothing, and housing.	<ul> <li>The child will learn about saints that cared for the poor and helpless.</li> <li>St. Francis of Assisi</li> <li>Katherine Drexel</li> <li>The child will make thank you notes to volunteers at a local soup kitchen.</li> <li>The child will bring canned goods for the local food pantry.</li> <li>The child will participate in the Lenten Rice Bowl campaign.</li> <li>The child will share and role play stories of saints.</li> </ul>	
E.	To protect God's creation by understanding that he/she will make the world a better place respecting the dignity of work and	<ul> <li>The child will make a list of ways he/she can help clean-up at playtime.</li> <li>The child will help water plants and care for classroom pets.</li> <li>The child will build a replica of his/her town with blocks.</li> <li>The child will create a school newspaper. He/she will interview community helpers and write about them in</li> </ul>	

	the rights of all workers.	<ul> <li>the newspaper.</li> <li>The child will invite his/her parent to come to school and talk about his/her job.</li> <li>The child will role-play a community helper and have classmates guess which one.</li> </ul>
F.	To welcome all people because we are united in solidarity as children of God and care for one another.	<ul> <li>The child will practice solidarity by naming ways he/she can treat classmates as a member of God's family.</li> <li>The child will list his/her special gifts.</li> <li>The child will list ways to resolve conflicts.</li> <li>The child will read books about different cultures.</li> <li>The child will celebrate different cultures by learning different dances from countries around the world.</li> <li>The child will celebrate United Nations Day on October 24 with a Parade of Nations.</li> </ul>
G.	To reverence and care for God's creation by cherishing the environment as God's sacred creation.	<ul> <li>The child will celebrate the feast of St. Francis.</li> <li>The child will take a BAG WALK and collect liter.</li> <li>The child will celebrate Earth Day by writing a prayer of thanksgiving for all of God's creation.</li> <li>The child will help recycle in the classroom.</li> <li>The child will recognize that some of God's gifts of nature are present in the sacraments: <ul> <li>water -Baptism</li> <li>olive oil -chrism - Holy Orders and Confirmation</li> <li>wheat and grapes - in the Eucharist</li> <li>oil - the Anointing of the Sick</li> </ul> </li> </ul>

## VII. Prayer

The child will deepen his/her experiences to be ready to live, pray and celebrate as a member of God's family. "Dance, sing, and pray with a joyful heart."

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To understand prayer is listening to God.	<ul> <li>The child will pray different kinds of prayer through teacher modeling: adoration, petition, and thanksgiving.</li> <li>The child will pray in his/her own words.</li> <li>The child articulates he/she can pray any place and any time.</li> <li>The child will make a prayer book.</li> </ul>	
В.	To show how Jesus teaches how to pray.	<ul> <li>The child will understand Jesus taught us the Our Father.</li> <li>The child will recite the Our Father.</li> </ul>	
C.	To pray the Sign of the Cross, the Our Father, Hail Mary and Glory Be to the Father.	<ul> <li>The child will make and pray the Sign of the Cross.</li> <li>The child will recite the Our Father.</li> <li>The child will recite the Hail Mary.</li> <li>The child will recite the Glory be to the Father.</li> <li>The child will pray the rosary.</li> </ul>	

- D. To discuss why morning, mealtime, and night prayers are important.
- The child will understand that he/she prays morning, mealtime, and night prayers in thanksgiving for God's creation.
- The child will describe that he/she prays to God to ask for help and blessings for the day.



## KINDERGARTEN – LITERACY DEVELOPMENT

#### I. READING STRATEGIES

**STANDARD**: The child will read, view, and hear a variety of meaningful, engaging, and informational stories and he/she will respond in literal, critical, and evaluative ways.

9	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To recognize words are separated by spaces.	<ul> <li>The child will count the number of words in a sentence.</li> <li>The child will use cubes to show how words are separated by spaces.</li> </ul>	
В.	To recognize sentences are made of separate words.	The child will clap for the words in a sentence and stomp his/her feet when he/she comes to the end.	
C.	To identify types of everyday print materials.	<ul> <li>The child will recognize poems.</li> <li>The child will recognize a newspaper article.</li> <li>The child will make a sign.</li> <li>The child will make and recognize labels for common objects in the classroom.</li> <li>The child will identify familiar storybooks in the classroom library.</li> </ul>	
D.	To identify parts of a book.	<ul> <li>The child will identify the cover of the book.</li> <li>The child will point out the title and title page of the book.</li> <li>The child will recognize the front and back of a book.</li> <li>The child will find the dedication page of a book.</li> <li>The child will identify the author's name on the cover of the book.</li> </ul>	
E.	To "emergently" read familiar books and recognize print and pictures to tell the story.	<ul> <li>The child will use picture/semantic, syntactic, and visual cues to comprehend text.</li> <li>The child will use pictures to tell a story and make predictions.</li> <li>The child will decode words by looking at the pictures and identifying letters with sounds.</li> <li>The child will look at pictures and identify what caused the illustrated event.</li> <li>The child will read decodable texts to practice and gain fluency.</li> </ul>	
F.	To track printed words from left to right demonstrating one-to-one correspondence.	The child will track words from left to right demonstrating left to right correspondence.	Use of a "word swatter" or track with their finger

#### II. READING COMPREHENSION

**STANDARD**: The child will make predictions about a story, notice text, problem solve and use new vocabulary using appropriate strategies before, during, and after reading in order to link content to their own experience.

9	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
		BEFORE READING	
Α.	To understand concepts about print	<ul> <li>The child will name the title, the author, the illustrator, and the table of contents if available.</li> <li>The child will understand the role of the author and the illustrator of a book.</li> <li>The child will understand parts of a book:         <ul> <li>Spine</li> <li>Cover</li> <li>Pages</li> <li>Title</li> <li>Front</li> <li>Back</li> </ul> </li> </ul>	
В.	To use pre-reading strategies to set context for reading and to aid comprehension.	<ul> <li>The child will take picture walks, predict, and question before reading.</li> <li>The child will use a graphic organizer to set a purpose for reading (e.g., a KWL CHART - K is for what you know: W is for questions what you want to know: L is what you learned).</li> </ul>	Other suggested graphic organizers:  • Anticipation Guides  • Picture Splashes
C.	To answer literal and easy inferential questions about texts read aloud.	<ul> <li>The child will discuss whether or not the story events are possible.</li> <li>The child will describe where and when the story takes place.</li> <li>The child will identify the problem and a possible solution to the story.</li> <li>The child will identify characters in the story</li> <li>The child will make connections to other stories or personal experiences that are similar to this story</li> </ul>	
D.	To identify and read common high frequency words	<ul> <li>The child will read from a list of common high frequency words (e.g., the, of, to, you, she, he, is, are, do, does, et al.)</li> <li>The child will recognize and read high frequency words from selected texts.</li> </ul>	
E.	To ask and answer questions about unknown words in a text.	<ul> <li>The child will predict meanings of unknown words, using prior knowledge, context, photos, illustrations and diagrams.</li> <li>The child will use newly learned vocabulary during class discussions.</li> </ul>	
		<u>DURING READING</u>	
F.	To ask questions when things do not make sense.	<ul> <li>The child will differentiate between fantasy and reality.</li> <li>The child will stop and ask if story makes sense.</li> </ul>	

G.	To identify important parts of the text.	The child will identify main idea, character, and setting.	
Н.	To make connections between text and self.	The child will draw a favorite part of a story and tell why.	
1.	To make predictions about what may happen next.	<ul> <li>The child will draw pictures and/or orally share what may happen next in the story.</li> <li>The child dramatizes predictions of what may happen next in the story.</li> </ul>	
		AFTER READING	
J.	To identify the specific purposes of a text	<ul> <li>The child will identify various purposes of a test:</li> <li>To find information</li> <li>To read for pleasure</li> <li>To receive a message</li> <li>Etc.</li> </ul>	
K.	To answer literal and simple inferential questions about texts read aloud.	<ul> <li>The child will draw conclusions, recall details and determine cause and effect.</li> <li>The child will answer "who," "what," "when," "where," "why" and "how" questions about the characters, setting, plot, theme, conflict, and point of view in a story.</li> <li>The child will confirm meanings of unknown words, using prior knowledge, context, photos, illustrations and diagrams.</li> </ul>	
L.	To retell information from a story.	<ul> <li>The child will dramatize the story.</li> <li>The child will retell the story in his/her own words.</li> <li>The child will retell information from a story in proper sequence</li> </ul>	
M.	To identify the setting, characters, theme, conflict, and important events of the plot in a story.	<ul> <li>The child will complete a graphic organizer that identifies topic, main idea, character, and setting.</li> <li>The child will note details, identify sequence, categorize, classify, and make predictions through drawings and dramatization.</li> </ul>	
N.	To identify the topic of a nonfiction text.	<ul> <li>The child will distinguish between real and fantasy.</li> <li>The child will discuss what they learned in the nonfiction text. (L in KWL)</li> </ul>	
О.	To make text-to-self connections.	<ul> <li>The child will make connections between what happened in the story and a similar personal experience or event that happened in a previously read story.</li> <li>The child will use puppets/role-play to show text-to-self connections.</li> </ul>	
P.	To express opinions	The child will make a chart/graph about how he/she	

	about texts and		liked the book explaining the reasons why.	
	reasons why.			
Q.	To identify the	•	The child will identify the words an author or orator	
	reasons an author		uses to create an image in the reader's mind.	
	gives to support	•	The child will identify basic similarities in and	
	points in a text.		differences between two texts on the same topic	
			(e.g., in illustrations, descriptions, or procedures).	

#### III. **PHONEMIC AWARENESS**

**STANDARD**: The child will join in songs, poems, books, and word games that provide oral language experiences that are appropriate to where the child is in his/her phonemic awareness.

:	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To produce rhyming words orally in response to spoken words.	<ul> <li>The child will sing songs, and recite poems, nursery rhymes, and chants, noting the rhyming words.</li> <li>The child will supply the rhyming word at the end of a nursery rhyme or familiar poem.</li> </ul>	
В.	To count, pronounce, blend, and segment syllables in spoken words.	<ul> <li>The child will blend onset and rime to words (syllable splitting).</li> <li>The child will clap the number of syllables in a word.</li> <li>The child will identify the number of syllables in two-syllable words.</li> <li>The child will identify the number of syllables in three-syllable words.</li> </ul>	i.e. identify syllables using Unifix cubes, musical instruments, etc.
C.	To identify and produce spoken words with similar initial sounds.	<ul> <li>The child will identify the initial consonant sounds</li> <li>The child will identify the beginning consonant sound in a word.</li> <li>The child will make connections between twp words beginning in similar sounds</li> <li>The child will produce groups of words orally that begin with the same initial sounds.</li> <li>In a series, the child will identify words beginning with the same sound.</li> </ul>	i.e.," I spy the same sounds at the beginning of boy, tent, turtle." The child responds tent and turtle.
D.	To identify spoken words with similar ending sounds.	The child will look at picture cards and find the picture cards with the same ending sounds.	
E.	To associate the long and short sounds with the common spellings (graphemes) for the five major vowels.	<ul> <li>The child will identify letters matched to short vowel sounds.</li> <li>The child will distinguish long and short vowel sounds in spoken one syllable words, e.g., bit/bite.</li> </ul>	
F.	To blend individual sounds to form a word (phoneme blending)	<ul> <li>The child will blend letters to make words such as /d//o//g/ = dog (et al).</li> <li>The child will blend up to three orally presented phonemes into a correct word.</li> </ul>	
G.	To segment and	The child will use letter cards to change the	

	isolate initial, medial, and final sounds of CVC (consonant- vowel-consonant)		beginning, medial, or ending letter to blend a new word: cat to cot: cot to cog; and cog to dog.	
H.	To substitute initial phoneme sounds.	•	The child will substitute beginning, middle, ending sounds of words (e.g., change pat to bat; pat to pot; and pat to pan)	

#### VIII. **PHONICS**

**STANDARD**: The child will see him/herself as a reader by involving him/herself in "playful" experiences that enhance the phonological awareness of sound as associated with print.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To demonstrate letter-sound correspondences for all single consonants.	<ul> <li>The child will name the letters of the alphabet.</li> <li>The child will name all upper and lower case consonants.</li> <li>The child will discriminate between upper and lowercase consonants.</li> </ul>	
В.	To identify letters matched to short vowel sounds.	The child will identify and name the vowels.	
C.	To match the letter sound with the letter symbol.	<ul> <li>The child will identify the sound with the letter symbol.</li> <li>The child will identify the sound with the letter symbol through game play such as letter bingo.</li> </ul>	
D.	To associate picture(s) with letter sounds.	<ul> <li>The child will draw or cut and paste pictures to make booklets to associate the picture with the letter sound.</li> <li>The child will use technology to associate pictures with letter sounds.</li> </ul>	
E.	To identify sounds in the initial, medial and final position.	The child will participate in games that identify where sounds are in a word.	
F.	To identify common sounds as soft and hard.	<ul> <li>The child will identify recorded sounds on tapes/CD.</li> <li>The child will identify consonants c and g as having two sounds (hard, soft)</li> </ul>	
G.	To identify rhyming and non rhyming words.	The child will play games to identify rhyming and non rhyming words.	
H.	To use common consonant sounds with short vowels to decode three letter - words.	<ul> <li>The child will write the consonant sounds with one color and the vowel sounds with another color to decode three letter words.</li> <li>The child will use the keyboard to make the sound and type the letter as he/she decodes three letterwords.</li> </ul>	

I.	To encode words (beginning spelling).	<ul> <li>The child will use picture cards to begin to spell simple words and make booklets or stories.</li> </ul>	
J.	To recognize the common phonograms.	<ul> <li>The child will create little picture books with common phonograms:</li> <li>AT, UG, IG, AND, OT, AM, UT, OP, IP, EN, ET</li> </ul>	
K.	To identify new meanings for familiar words and apply them accurately (e.g., knowing a duck is a bird and learning the verb to duck).	<ul> <li>The child will decode compound words, contractions and words with common inflectional endings, e.g.,-s, -es, -ed, -ing.</li> <li>The child will recognize that words have more than one meaning</li> <li>The child will use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.</li> </ul>	
L.	To demonstrate understanding of frequently occurring nouns, verbs and adjectives by relating them to their opposites.	<ul> <li>The child will identify opposites of given words</li> <li>The child will identify words that mean the same as the given word</li> <li>The child will understand that nouns name people, animals, places, and things</li> <li>The child will understand that verbs are action words – something you can do</li> <li>The child will understand that adjectives describe things</li> <li>The child will identify real-life connections between words and their use.</li> </ul>	

## IX. AUDITORY MEMORY/LISTENING

**STANDARD:** The child will demonstrate an understanding of and respect for language use and patterns, listen attentively and respectfully, use auditory cues and to discriminate between sounds, and engage in hearing sounds as parts of language as well as meaning.

STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A. To identify two nonsense words and number sets.	<ul> <li>The child will engage in memory games that encourage the repletion of nonsense words or number sets.</li> <li>The child will recognize sounds in stories: grr, whoosh, whaa, mmm.</li> </ul>	
B. To distinguish between and identify sounds.	<ul> <li>The child will recognize high or low notes on instruments.</li> <li>The child will identify sounds of nature and the environment.</li> <li>The child will identify common sounds.</li> <li>The child will identify the voices of familiar people.</li> </ul>	
C. To reproduce	The child will use classroom instruments to make	

	rhythmic patterns.	<ul> <li>different rhythmic beats.</li> <li>The child will use drums to mimic tempo.</li> <li>The child will identify fast and slow parts of music.</li> <li>The child will recognize language patterns in nursery rhymes, finger plays, and songs.</li> </ul>	
D.	To listen to nursery rhymes and verse.	The child will use puppets or other props to dramatize the nursery rhyme or verse.	
E.	To listen for details in a story.	The child will listen to a story and retell it in one or two sentences.	
F.	To retell the story in sequence.	<ul> <li>The child will make a small three page picture book drawing the beginning, middle, and end of the story.</li> <li>The child will pick two friends and each will dramatize a part of the story. Classmates guess if it is the beginning, middle, or end.</li> </ul>	
G.	To follow simple oral directions.	The child will follow one step direction, and then gradually build to more complicated three-and-four step directions.	

#### X. **ORAL LANGUAGE DEVELOPMENT**

**STANDARD:** The child will promote the use of meaningful vocabulary for every day success as the child works in small groups for problem solving and group projects.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To use the names of the days of the week and weather words appropriately.	•	The child will name the days of the week on the calendar.  The child will use common weather words at circle time.	
В.	To use color words correctly.	•	The child will match color words with the correct color.	
C.	To recognize numbers and number words.	•	The child will match number words with the quantity.	
D.	To use sequential language.	•	The child will use first, second, third, etc. when describing the position of objects or things.	
E.	To demonstrate command of the conventions of standard English grammar and usage when speaking.	•	The child will use common nouns, verbs, adjectives, and verbs when playing, sorting or categorizing games and when building with blocks.	
F.	To focus on the	•	The child will participate in reading stories to peers	

	speaker when listening.	to experience how important it is to be attentive to the speaker.
G.	To listen to acquire information and to respond to questions.	The child will answer a question by creating a question using what, where, when, or why.
Н.	To take turns during conversation.	The child engages in back and forth conversation with diverse partners during center and free play.
I.	To participate in large and small group discussion.	<ul> <li>The child will participate in one-to-one conversations and group discussions.</li> <li>The child will asks questions and participate in discussions using complete sentences.</li> </ul>
J.	To ask and answer questions in order to seek help, get information, or clarify something that is not understood.	<ul> <li>The child will ask questions and participate in discussions using complete sentences</li> <li>The child will ask questions using what, where, how, and why as prompts.</li> </ul>
K.	To speak audibly and express thoughts, feelings, and ideas clearly.	<ul> <li>The child will reread favorite stories and make new endings</li> <li>The child will rewrite or retell nursery rhymes</li> <li>The child will read orally at his/her level</li> <li>The child will discusse the meanings of words</li> <li>The child will be provided with opportunities to make personal connections to stories and classroom experiences</li> </ul>
L.	To speak expressively and clearly when telling a story or reciting a poem.	<ul> <li>The child will retell a story with expression.</li> <li>The child will use puppets or props to retell a story using a clear voice.</li> </ul>
M.	To share information and ideas in complete sentences.	<ul> <li>The child will use a tape recorder to record a story with three or four sentences.</li> <li>The child will use complete sentences with at least 5 words.</li> </ul>
N.	To relate an experience or a story in a logical sequence.	The child will reread/retell a favorite story in sequence but add a new ending individually/small group/ or as a class.
0.	To recite short poems, rhymes, and songs.	<ul> <li>The child will recite a favorite nursery rhyme or poem.</li> <li>The child will recite a favorite nursery rhyme but rewrite the ending.</li> </ul>
Р.	To describe familiar objects, places, events, feelings, etc. and, with prompting and support, provide	<ul> <li>The child will use descriptive words (adjectives) to describe events, objects etc.</li> <li>The child will make up a book of synonyms and antonyms.</li> </ul>

addition	al detail.	<ul> <li>The child will work in groups to draw pictures of opposites.</li> </ul>	
•	e simple sisons, e.g., al words.	The child will make a simple booklet showing an object in the following positions: up, down, under, in front of, next to etc.	

#### XI. WRITTEN LANGUAGE

STANDARD: The child will express, develop, and substantiate ideas and experiences through his/her own writing, artistic, and technical presentations.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To use periods, question marks, and exclamation marks at the ends of sentences.	<ul> <li>The child will recognize that telling sentences in a story end with a period.</li> <li>The child will recognize a question mark is placed at the end of a sentence to ask a question.</li> <li>The child will recognize an exclamation mark is placed at the end of a sentence to express surprise.</li> </ul>	
В.	To use directionality in print to show left-to-right progression, and top-to-bottom.	<ul> <li>The child will use technology to show left to right progression and top- to- bottom.</li> <li>The child will use bodily kinesthetic to show left-to right and top-to-bottom.</li> </ul>	
C.	To write first and last name with correct capitalization.	The child will recognize and write his/her first and last name by the end of the kindergarten year.	
D.	To use uppercase letters to begin sentences, names, and the word I.	<ul> <li>The child will complete a story starter using uppercase letters to begin sentences, names, and the word "I".</li> <li>The child will use uppercase letters when labeling cubbies, etc.</li> </ul>	
E.	To leave spaces between words.	<ul> <li>The child will write a sentence leaving spaces between words.</li> <li>The child will use a tool (clothespin, spaceman, or another pencil) to show proper space for spacing.</li> </ul>	
F.	To recognize the names of letters and be able to write upper and lowercase letters when the letter name or sound is dictated.	<ul> <li>The child will write upper and lower case letters when given in dictation form</li> <li>The child will write phonetic words correctly when given in dictation</li> </ul>	
G.	To spell high frequency words: I, a, it, go, the, and.	<ul> <li>The child will use high frequency words when writing sentences.</li> <li>The child will circle and identify high frequency words in other types of texts: newspapers,</li> </ul>	

		magazines, and books.		
Н.	To identify types of text.	The child will identify traits of a storybook, poem, sign, label, newspaper, etc.		
		WRITING PROCESS -PORTFOLIO		
I.	To look at pictures and listen to discussions to generate ideas for writing.	The child will brainstorm ideas within a group and find pictures to represent their ideas.		
J.	To spell simple words phonetically.	<ul> <li>The child will use magnetic letters and letter tiles to spell words. (Photos may be taken to be included in portfolio)</li> <li>The child will use inventive spelling to enable greater expression of ideas and thoughts without the risk of misspellings.</li> </ul>		
K.	To revise by adding details to pictures or letters to words.	<ul> <li>The child will keep a portfolio on written work and revise and edit his/her work throughout the year.</li> <li>The child will, with guidance and support, respond to questions and suggestions to add details to strengthen writing as needed.</li> </ul>		
L.	To talk about writing with the teacher.	The child will collaborate with the teacher and peers ideas about a story and set goals to create a story.		
M.	To publish and present final products in a variety of ways including technology.	The child will work independently or with a small group and present his/her story using a myriad of materials: power point, smart board, flip chart, or pop-up book.)		
		Writing Genres, Traits and Crafts		
	<del>-</del> 1	<u>DESCRIPTIVE</u>		
N.	To use a combination of drawing, dictating, and writing to describe a topic, idea, or event.	<ul> <li>The child will make a simple booklet showing an object in the following positions: up, down, under, in front of, next to etc.</li> <li>The child will write simple cards and messages.</li> </ul>		
	NARRATIVE NARRATIVE			
0.	To use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction	<ul> <li>The child will make a list.</li> <li>The child will write simple notes to classmates.</li> <li>The child will draw and write in journals about the day's events.</li> </ul>		

	to what happened.	
P.	To draw and write a story with a character and a problem.	The child will write a simple story starter.
		PERSUASIVE
Q.	To use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is).	<ul> <li>The child will form their own opinion related to a specific topic</li> <li>The child will write their own opinion piece stating their opinion and the reasons to support that opinion</li> <li>The child will illustrate their writing</li> <li>The child will publish and share their writing</li> </ul>
	,	WRITING TOOLS
R.	To use many tools to write.	The child will use pencils, crayons, markers, stamps, and paints to write.
S.	To use technology to write	<ul> <li>The child will write and publish simple books on the computer.</li> <li>The child will use emails to write simple messages to friends.</li> <li>The child will create simple power points to convey a message.</li> </ul>



### KINDERGARTEN – MATHEMATICAL THINKING

#### I. NUMBER AND OPERATIONS

**STANDARD:** The child will actively demonstrate an understanding of whole number concepts such as counting, cardinal numbers, ordinal numbers, placing objects in one-to-one correspondence and classifying to use number sense and numeration.

**STANDARD**: The child will communicate ideas through oral and written language, physical gestures, his/her drawings, invented and conventional symbols, and the language of mathematics.

STU	JDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To count with understanding and recognize sets of objects.	<ul> <li>The child will count blocks and puts them in order.</li> <li>The child will count manipulatives</li> <li>The child will use a number line to count forward and backward.</li> <li>The child will count and identify numbers during game play (e.g., hopscotch).</li> </ul>	
В.	To count to 100 by ones and tens.	<ul> <li>The child will count to 100 chorally</li> <li>The child will count to 100 with guidance and support</li> </ul>	
C.	To develop an understanding of the relative position and magnitude of whole numbers, of ordinal and cardinal numbers and their connections.	<ul> <li>The child will identify his/her place in line.</li> <li>The child will, given a number, identify the next number.</li> <li>The child will identify the missing number in a sequence.</li> <li>The child will order events in a story as happening first, second, third, etc.</li> </ul>	
D.	To count backwards and forwards by rote to at least thirty.	<ul> <li>The child will use the calendar to count backwards and forwards.</li> <li>The child will count and charts days to the 100<sup>th</sup> Day of School.</li> <li>The child will use an Advent calendar to count the days before Christmas.</li> <li>The child will sing/recite simple counting songs and poems.</li> </ul>	
E.	To group up to thirty objects by twos, fives, and tens.	<ul> <li>The child will skip-count by twos.</li> <li>The child will skip-count by fives.</li> <li>The child will skip-count by tens.</li> </ul>	
F.	To connect number words and numerals to quantities they represent of up to thirty objects in a set.	<ul> <li>The child will use various physical models and representations to match numerals to quantities they represent.</li> <li>The child will use technology to match numerals to a group of objects.</li> <li>The child will use puzzles that have the number word and match it to its quantity.</li> </ul>	

		<ul> <li>The child will use a "workspace" in which objects are placed to determine quantity.</li> <li>The child will, given a numeral, assemble the correct number of objects to represent the quantity.</li> </ul>	
G.	To count on from a given number.	<ul> <li>The child will, given a number, identify the next number.</li> <li>The child will identify the missing number in a sequence.</li> <li>The child will count forwards and backwards from a given number other than 0 or 1.</li> </ul>	
H.	To compare groups of up to thirty objects as having more or fewer.	<ul> <li>The child will use sets of different numbered objects to make comparisons of amounts (I have more blue blocks than green blocks).</li> <li>The child will identify whether the number of objects in one group is "greater than," "less than," or "equal to" the number of objects in another group.</li> </ul>	
I.	To add and subtract whole numbers and recognize the relationship between the two operations.	<ul> <li>The child will use dice to add two numbers together.</li> <li>The child will add and take away objects from a group.</li> </ul>	
J.	To write the number sentence that corresponds to story problems using addition, subtraction, and equals symbols (+, -, =) correctly.	<ul> <li>The child will, given a story problem, write the number sentence to match the story problem correctly.</li> <li>The child will represent addition and subtraction with objects, fingers, mental images, drawings, sound (e.g., claps), technology resources, acting out situations, verbal explanations, expressions, or equations.</li> <li>The child will act out and solve addition and subtraction story problems that reflect real-world experiences and contextual problems and describe the strategy or reasoning used to solve a problem. (e.g., put two crayons together with four crayons; then count to determine the number of crayons needed for all students at a table.)</li> </ul>	
K.	To integrate mathematical relationships to deal flexibly with numbers and move from one operation to another with skill.	<ul> <li>The child will write simple number stories for addition and subtraction.</li> <li>The child will solve simple story problems for addition and subtraction, and choose the correct operation to solve.</li> </ul>	
L.	To explain the effects of adding and subtracting whole numbers.	The child will model, discuss, and solve a variety of addition and subtraction problems.	

M.	To make a one-to-one correspondence with numbers zero to ten.	<ul> <li>The child will, given ten objects, draw another object for every object in the set.</li> <li>The child will give materials (pencil, paper, napkin) to every child in the classroom.</li> </ul>	
N.	To write number symbols zero through thirty in numerical order.	<ul> <li>The child will write numbers zero to thirty in order.</li> <li>The child will write the number that corresponds to a given quantity.</li> </ul>	
0.	To organize and consolidate materials, pictures, and diagrams to express mathematical concepts.	<ul> <li>The child will draw a picture to represent an addition or subtraction sentence.</li> <li>The child will illustrate number sentences using concrete objects.</li> <li>The child will draw a picture to solve an addition or subtraction sentence</li> </ul>	
P.	To solve contextual problems using all addition sums to 18 and subtraction differences from 10 with flexibility and fluency.	The child will use a variety of methods and tools to solve addition and subtraction problems, including objects, mental computation, estimation, paper and pencil, and technology.	
Q.	To communicate, reflect upon, and clarify his/her thinking about mathematical ideas and situations to peers, teachers and others.	<ul> <li>The child will compare original number books with peers.</li> <li>The child will discuss the process of adding and subtracting with peers.</li> </ul>	
R.	To explore and discuss fair share, equal parts of a whole, divide into two, three, and four parts.	<ul> <li>The child will divide paper into two, three, and four equal parts.</li> <li>The child will identify one whole and one half of an object.</li> <li>The child will recognize a half and puts two halves of an object together to make a whole.</li> </ul>	
S.	To identify and name pennies, nickels, dimes, and quarters.	The child will sort money into the correct coin (pennies, nickels, dimes, and quarters.)	
T.	To count pennies, nickels, and dimes.	The child will count groups of pennies, nickels, or dimes to determine the amount of money.	

### II. ALGEBRA

**STANDARD:** The child will recognize, compare, and analyze patterns as important components of their intellectual development.

STU	JDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To sort, classify, and order objects by size, number, and other properties.	<ul> <li>The child will sort objects by color, shape, and size</li> <li>The child will sort using a variety of attributes.</li> </ul>	
В.	To recognize, describe, and extend patterns such as sequence of sounds or shapes or simple numeric patterns and translate them from one representation to another.	<ul> <li>The child will build patterns using colored cubes.</li> <li>The child will pattern sounds by clapping simple games.</li> <li>The child will note patterns in stories like rhyming words.</li> <li>The child will use bodily kinesthetics to show patterns (hands on head, hands on hips, hands on head, etc.)</li> </ul>	
C.	To analyze how both repeating and growing patterns are generated.	The child will duplicate and extend simple patterns.	
D.	To represent and describe mathematical relationships.	The child will model real-life situations that represent the result of counting, combining and separating sets of objects (addition and subtraction of whole numbers) with objects, pictures, symbols and open sentences.	
E.	To take apart numbers less than or equal to 10 into pairs in more than one way.	<ul> <li>The child will demonstrate understanding of equivalence or balance with objects, models, diagrams, operations or numbers such as using a balance scale or an arm balance showing the same amount on both sides.</li> <li>The child will demonstrate an understanding of equivalence or balance of sets using objects, models, diagrams, numbers, whole number relationships (operations) and the equals sign. For example: 2 + 3 = 5 is the same as 5 = 2 + 3 and the same as 4 + 1 = 5.</li> </ul>	
F.	To compose and take apart numbers from 11 to 19 into ten ones and some further ones, (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	<ul> <li>The child will represent and identify whole numbers up to 100 as groups of tens and ones using models and number lines.</li> <li>The child will model real-life situations that represent the result of counting, combining and separation sets of objects (addition and subtraction of whole numbers) with objects, pictures, symbols and open sentences.</li> <li>The child will demonstrate understanding of equivalence or balance with objects, models, diagrams, operations or numbers such as using a balance scale or an arm balance showing the same amount on both sides.</li> </ul>	

	The child will demonstrate an understanding of equivalence or balance of sets using objects, models, diagrams, numbers, whole number relationships (operations) and the equals sign. For example: $2 + 3 = 5$ is the same as $5 = 2 + 3$ and the same as $4 + 1 = 5$ .	
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

# III. GEOMETRY, SPATIAL SENSE, AND MEASUREMENT

**STANDARD:** The child will demonstrate an understanding of terms *near to, far away from,* and *next to,* and to recognize and name geometric shapes. (Within the Kindergarten math program, measurement bridges the two main areas of mathematics – geometry and number.)

STL	JDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To recognize, name, build, draw, compare, and sort two-and three-dimensional shapes.	<ul> <li>The child will identify, describe, and draw the four basic shapes: circle, square, rectangle, and triangle.</li> <li>The child will investigate two and three-dimensional shapes using manipulatives such as tangrams, pattern blocks, color tiles, tessellations, and/or geoboards.</li> <li>The child will identify and describe familiar solids (cubes, spheres, cylinders, cones, and prisms) in the environment.</li> </ul>	
В.	To describe attributes and parts of two-and three-dimensional shapes.	<ul> <li>The child will sort and classify shapes by their properties noticing similarities and differences.</li> <li>The child will analyze and describe the common property of a shape through riddles and making minibooks.</li> </ul>	
C.	To investigate and predict the results of putting together and taking apart two-and three-dimensional shapes.	The child will, with various manipulatives such as tangram boards, take apart and build two-dimensional shapes.	
D.	To model shapes and solids in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	<ul> <li>The child will create models that resemble familiar, real-world structures</li> <li>The child will compose simple shapes to form larger shapes (e.g., "Can you join these two triangles with full sides touching to make a rectangle?")</li> </ul>	
J.	To recognize geometric shapes and structures in the environment and specify their location.	<ul> <li>The child will take nature walks and describe geometric shapes and their locations (A square above the door, a triangle under the window, etc.)</li> <li>The child will look at a picture and find geometric shapes and describe their location.</li> </ul>	
E.	To investigate, compare, and order length, width, volume,	The child will describe length, height, and width using comparatives and superlatives (i.e., wide, wider, widest)	

	capacity, area, weight, time, and temperature.	<ul> <li>The child will use teaspoons, measuring cups, and links to measure.</li> <li>The child will measure objects on a scale and makes comparisons of objects to tell which is heavier/lighter.</li> <li>The child will order events: first, second, third, etc.</li> </ul>	
F.	To tell time to the hour and half hour.	<ul> <li>The child will use a clock to tell time to the hour.</li> <li>The child will, given a time, set the hands on a clock.</li> <li>The child will tell time on an analog and digital clock.</li> </ul>	
G.	To find and name locations such as "next to" in coordinate systems such as maps.	The child will draw maps using simple shapes to identify location.	
Н.	To make and use estimates of measurement.	The child will use blocks to measure and makes comparisons of common classroom objects (How many squares would it take to measure the length of a desk? Would it take more/fewer rectangles?)	
1.	To make and use measurement in problems in everyday situations.	<ul> <li>The child will identify four seasons and describes their characteristics.</li> <li>The child will distinguish today, tomorrow, yesterday, daytime, and nighttime.</li> </ul>	
J.	To recognize and create shapes that have symmetry.	<ul> <li>The child will use mirrors to identify symmetry in objects.</li> <li>The child will identify symmetrical blocks.</li> </ul>	
K.	To relate ideas in geometry to ideas in number and measurement.	The child will measure square and rectangles using standard and nonstandard forms of measurement.	
L.	To measure using standard and nonstandard units.	<ul> <li>The child will use rulers, tape measures, and string to measure.</li> <li>The child will use insects, teddy bear counters, paperclips, etc. to measure.</li> </ul>	

## IV. DATA ANALYSIS AND PROBABILITY

**STANDARD:** The child will gather and record data and to make predictions through many significant every day experiences.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENTS/NOTES
gatl him	pose questions and her data about n/herself and her surroundings.	<ul> <li>The child will ask questions of peers to collect data.         (How many students like chocolate milk? How many students like white milk?, etc.)</li> <li>The child will discuss and interpret numerical problems that arise naturally in the class situation.</li> </ul>	

В.	To share questions, data, and predictions with peers and listen to the predictions of others with critical respect.	<ul> <li>The child will work in a small group/team to share data and discuss what the data means.</li> <li>The child will participate in group brainstorming.</li> <li>The child will work in cooperative groups to make predictions, gather, and communicate information.</li> </ul>	
C.	To sort and classify objects according to their attributes and organize data about the objects.	The child will sort blocks, crayons, cars, etc by color and organizes data about the objects to create a graph.	
D.	To represent data using concrete objects, pictures, and graphs.	The child will use pictographs, bar graphs, and tally marks to represent data.	
E.	To describe parts of the data and the set of data as a whole to determine what the data show.	<ul> <li>The child will produce graphs with real objects to determine more, less, equal, most, and least.</li> <li>The child will count, read, and compare numbers of objects in pictographs (more, less, equal to)</li> </ul>	
F.	To discuss events related to his/her experiences as likely or unlikely.	The child will predict through graphing activities with the daily calendar and daily activities.	

# V. PROBLEM SOLVING AND REASONING

**STANDARD**: The child will define and solve problems that involve mathematical thinking skills and real life situations.

**STANDARD:** Through mathematics as reasoning, the child will apply prior knowledge to solve daily problems.

STU	JDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To solve mathematical problems that occur in daily life and draw logical conclusions.	<ul> <li>The child will use objects and pictures to demonstrate and solve simple story problems.</li> <li>The child will participate in open-ended math projects.</li> </ul>	
В.	To use models, known fact, properties, and relationships to justify his/her thinking.	The child will recognize math concepts and use mathematical skills to comprehend children's literature.	
C.	To justify his/her answers, solutions, and processes.	The child will work with a cooperative group to discuss his/her process to solve a problem and justify his/her answer.	
D.	To use patterns and classifications to analyze mathematical situations.	<ul> <li>The child will use cooperative play in building with pattern blocks to extend classification skills.</li> <li>The child will use blocks and pattern blocks to develop concepts of shape, equivalency, one-to-one correspondence, measurement, and number.</li> </ul>	

E.	To apply and adapt appropriate mathematical strategies to problem solving situations.	The child will use data from pictures, diagrams, and graphs to solve a variety of problems.	
F.	To reflect upon his/her problem solving strategies.	The child will discuss and explore numerical problems that arise naturally in class.	
G.	To use problem solving to build new mathematical knowledge.	The child will reflect upon his/her problem solving and use the data to understand new mathematical knowledge.	
H.	To use the language of mathematics to represent, discuss, listen, write, and read mathematics as a vital part of learning.	The child will use appropriate vocabulary to express and solve word problems.	
1.	To estimate to solve problems.	<ul> <li>The child will estimate quantities in jars.</li> <li>The child will estimate a daily "estimating jar" at the morning meeting.</li> </ul>	



### KINDERGARTEN – SCIENCE

## I. SCIENTIFIC INQUIRY KINDERGARTEN

**STANDARD:** The child will develop curiosity, respect for life, willingness to take risks, perseverance, respect for data, and willingness to collaborate.

**STANDARD:** the child will look for patterns, see relationships, notice change, identify cause and effect, and see how form is related to function in authentic experiences.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To ask questions about objects, organisms, and events in their environment during shared stories, conversations, and play.	<ul> <li>The child will enjoy scientific experiments where he/she asks questions to stimulate his/her curiosity (e.g., mixing baking soda and vinegar and feeling the bubbles; mixing food coloring to make secondary colors, or painting with water outdoors and watching it dry).</li> <li>The child will make predictions about the experiment.</li> <li>The child will raise questions about events around him/her using words such as: who, what, where, why, and how (e.g., How does a caterpillar become a butterfly? How does a chick come out of an egg?)</li> </ul>	
B.	To predict what will happen next based on previous experiences.	<ul> <li>The child will test his/her ideas to predict what will happen next.</li> <li>The child will predict what happens next using a picture clue or illustrations.</li> <li>The child will predict what happens next relating to his/her life experience.</li> </ul>	
C.	To investigate natural laws acting upon objects, events and organisms.	<ul> <li>The child will investigate ways at the block center to explore ways to make small cars or trucks go faster.</li> <li>The child will explore ways to mix colors at the art center.</li> <li>The child will sort, compare, classify, and observe characteristics of objects, events, and organisms (e.g., Sort and classify objects that can roll. Observe what is the same and different about a cow and a dog. Sort living and non-living things. )</li> </ul>	
D.	To use more of the senses to observe and learn about objects, organisms and phenomena for a purpose.	<ul> <li>The child will understand that information is gained when investigating with his/her senses:</li> <li>To touch</li> <li>To look</li> <li>To listen</li> <li>To smell</li> <li>To taste</li> </ul>	

E.	To explore objects, organisms and events using simple equipment.	<ul> <li>The child will explore objects, organisms and events using simple equipment such as:</li> <li>Hand lens</li> <li>Magnifying box</li> <li>Measuring tools (ruler, tape measure, thermometer, measuring cup)</li> <li>Eye droppers</li> <li>Scales</li> </ul>	
F.	To begin to make comparisons between objects or organisms based on characteristics.	<ul> <li>The child will engage in simple investigations including:</li> <li>Making predictions</li> <li>Gathering and interpreting data</li> <li>Recognizing simple patterns</li> <li>Drawing conclusions</li> </ul>	
G.	To record or represent and communicate observations and findings through a variety of methods with assistance.	<ul> <li>The child will record observations, explanations, and ideas through multiple forms of representation including:</li> <li>Drawings</li> <li>Simple graphs</li> <li>Writing</li> <li>Movement</li> </ul>	

## II. EARTH SCIENCE KINDERGARTEN

**STANDARD:** The child will explore earth science using his/her senses and a variety of tools and simple measuring devices to gather information, investigate materials, and observe processes and relationships of weather, seasons, the sun, moon and stars.

**STANDARD:** The child will observe and represent the ideas through play, art, and conversation using the appropriate scientific language.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESS	SMENT/ NOTES
A.	To explore weather	•	The child will name the kinds of weather:	Scientif	ic vocabulary:
	naming the different		Sunny	≎	Rainy
	kinds of weather.		Rainy	≎	Windy
			Windy	≎	Snowy
			Snowy	٥	Sunny
		•	The child will observe and record the weather daily at		
			circle time	CATHC	H THE WIND
		•	The child will draw his/her favorite type of weather	Gail Gib	bons
		•	The child will sort and math pictures identifying the		
			same kind of weather		
		•	The child will name the types of clothes he/she will		
			wear on a		
			Snowy day		
			Windy day		

		<ul> <li>Sunny day</li> <li>Rainy day</li> <li>The child will dramatize different types of extreme weather</li> <li>The child will understand that snowflakes are made up of many ice crystals</li> <li>The child will understand that no two snowflakes look alike</li> <li>The child will understand the effects of wind using a small hand fan experimenting and predicting what will happen to certain objects when the wind blows e.g., feathers, paper, plastic bags, aluminum foil, plants, and wooden blocks</li> <li>The child will create model sailboats and share ideas with classmates to test his/her boat at a water table</li> </ul>	
		<ul> <li>or in a tub and record observations in a journal</li> <li>The child will observe and predict how wind moves objects on the surface of water</li> </ul>	
В.	To recognize a number of tools used to measure and predict weather.	The child will use a thermometer, rain gauge, wind gauge, and other tools to predict and describe weather	Scientific tools:  Thermometer Rain gauge Wind gauge
C.	To recognize, sort, and describe different types of clouds.	<ul> <li>The child will sort pictures of clouds by categories e.g., white or gray; puffy or flat</li> <li>The child will describe clouds as white, gray, puffy, or thin</li> <li>The child will observe and record information about clouds during circle time</li> <li>The child will create a book that shows different kinds of cloud shapes.</li> <li>The child will make paintings that convey the shape and color of clouds</li> </ul>	Scientific Vocabulary:  Cloud  IT LOOKED LIKE SPILT  MILK by Charles G.  Shaw
D.	To identify what occurs in nature and what people do in different seasons.	<ul> <li>The child will name the four seasons:</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> <li>Spring</li> <li>The child will take a simple survey among classmates to classify, compare, and communicate his/her favorite season</li> <li>The child will take a nature identifying and describing what happens in nature during different seasons.</li> <li>The child will dramatize what people do in a particular season</li> <li>The child will collaborate with a group of children to create a particular season using blocks, paper, and gears</li> <li>The child with the assistance of the teacher will make a Venn diagram showing what types of clothes that would be worn in the winter and the summer</li> </ul>	Scientific Vocabulary:  Summer Fall Winter Spring  ANNO'S COUNTING BOOK by Mitsumasa Anno

		The child will make a shoebox diorama of a particular season	
E.	To recognize that the sun creates shadows and appears to move through the sky.	<ul> <li>The child will experiment with an overhead projector observing how the shadow changes as he/she stands close to the light source: further away from the light source</li> <li>The child will create shadow puppets and put on a puppet show using the overhead projector to create the shadows.</li> <li>The child will create shadows of tall block structures and using a flashlight to pretend it is the Sun he/she will see how the shadow changes the size/and position of the shadow</li> <li>The child will measure his/her friends' shadow</li> </ul>	Scientific Vocabulary:  Shadows Shade Heat Read: SHADOWS by Carolyn B. Otto
F.	To name elements of the night sky, such as the Moon and stars, and understand that the night sky changes.	<ul> <li>The child will describe what he/she sees in the night sky</li> <li>The child will describe how the moon changes shapes</li> <li>The child will create a Venn diagram comparing a night sky and a day sky</li> <li>The child will create a journal of the different shapes of the moon</li> <li>The child will create a night sky collage showing the moon, stars, and some buildings</li> <li>The child will reproduce Van Gogh's STARRY NIGHT and explain how the night sky is different than the day sky</li> <li>The child will dramatize traveling to the moon.</li> <li>The child will imagine that the pegs on geoboards are stars and will create three or four star-shapes using rubber bands to connect the pegs</li> </ul>	Scientific Vocabulary:  Patterns  Moon Stars Constellation charts Crescent Moon Quarter Moon Full Moon Full Moon Read: How Many Stars in the Sky? Lenny Hort The Sky is Full of Sars Caroline Arnold The Moon Michael Jay
G.	To explore how weather varies depending upon where you live on Earth and which season it is.	<ul> <li>The child will make a list of things that children see, feel, hear, and wear during the winter in various places across the globe</li> <li>The child will make a page for a class book showing how people will dress in the winter in different regions of the United States         <ul> <li>Northwest – Oregon and Seattle tend to be cloudy during the winter</li> <li>Southwest – Arizona and New Mexico on a winter day are warm.</li> <li>Northwest – Maine and Connecticut are cold.</li> <li>Southeast – Florida is mild with temperatures in the 50-60*F</li> </ul> </li> </ul>	

## III. LIFE SCIENCE KINDERGARTEN

**STANDARD:** The child will expand his/her knowledge of life science by observing, describing, and discussing the natural world, living things, and natural process.

**STANDARD:** The child will develop increasing abilities to classify, compare, sequence, and contrast living things in their habitat as they grow, change, and protect themselves.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ CONTENT NOTES
A.	To understand that plants have parts that help them get what they need to grow and mature.	<ul> <li>The child will discover plant characteristics by observing and comparing plants and their parts</li> <li>The child will match sets of different plants, fruits, and vegetables</li> <li>The child will name the parts of a plant</li> <li>The child will experiment sucking water through a straw and make the connection between tubes in a stem of a plant and a straw</li> <li>The child will experiment with a celery stalk, placing it in colored water, observing what happens, and documenting the results</li> <li>The child will create a picture by dipping pieces of cut potatoes and carrots into different colored tempera paints</li> <li>The child will develop new scientific vocabulary by looking at different pictures of trees and describing the different parts of the trees:         <ul> <li>Trunk</li> <li>Limbs</li> <li>Branches</li> <li>Needles</li> <li>Leaves</li> <li>Windy day</li> <li>Sunny day</li> <li>Rainy day</li> </ul> </li> </ul>	Scientific vocabulary:  Root  Stem  Leaf  Seed  Leaves  Trunk  Limbs  Branches  Needles
В.	To recognize that a plant needs air, water, light, and soil to grow.	<ul> <li>The child will name the four things a plant needs to grow:         <ul> <li>Air</li> <li>Light</li> <li>Water</li> <li>Soil</li> </ul> </li> <li>The child will plant a seedling to begin to understand the function of roots and how important it is to provide water, light, air, and soil for the plant to grow</li> <li>The child will make a collage of a flower or plant using small pieces of construction paper.</li> <li>The child will use nonstandard units to measure and journal the growth of the classroom plants</li> </ul>	Scientific Vocabulary: Air Light Water Soil  Read: CARROT SEED by Ruth Krauss

C.	To identify that plants' seeds are found in its fruit, and that same type of plant will grow from the seed.	<ul> <li>The child will place pictures of a plant growing in sequence.</li> <li>The child will sort and classify different plants: flowers, fruits, and vegetables</li> <li>The child will make a prediction based on available data i.e., predict how many seeds are in an apple using unifix cubes.</li> <li>The child will draw and label the sequence of a plant growing</li> <li>The child will sort and classify different beans and create a collage.</li> </ul>	Scientific Vocabulary:  Seed Seedling Fruit Flower
D.	To identify plants by their parts.	<ul> <li>The child will classify and sort different plant picture cards with two attributes: flowers and no flowers</li> <li>The child will make a picture of his/her favorite flower making the flower, stem, and leaves</li> <li>The child will make flowers out of pattern blocks making a flower, steam, and leaves.</li> <li>The child will go on a nature walk and sort and classify different kinds of leaves</li> <li>The child will create leaf rubbings and note the leaf patterns and write the name of the leaf with teacher assistance</li> <li>The child will describe how flowers are alike and different</li> </ul>	Scientific Vocabulary:      Leaf     Leaves     Flower     Flowers  COUNTING WILDFLOWERS by Bruce McMillan
E.	To identify and explore plants that we eat and the foods that come from different plants.	<ul> <li>The child will identify common fruits and vegetables</li> <li>The child will create a recipe for vegetable soup</li> <li>The child will create fruits and vegetables with play dough</li> </ul>	Scientific Vocabulary:
F.	To understand the basic definition of an animal and explore animals in his/her neighborhood.	<ul> <li>The child will sort pictures noting if it is a plant or animal</li> <li>The child will brainstorm and graph the different types of animals he/she sees on the way to school</li> <li>The child will classify animals by discussing similarities and differences. e.g., the number of legs, does the animal have fur, does it have feathers, a beak, tail etc</li> <li>The child will create an animal mural showing the habitat of different animals (e.g., Birds – fly in the sky; dogs, cats, cows, horses – live on land; fish swim).</li> </ul>	Scientific Vocabulary"  Animal  Habitat
G.	To learn about insects and arthropods, their attributes, and where they live.	<ul> <li>The child will describe insects as having 6 legs and 3 body parts</li> <li>The child will note that the color of the bug offers protection from its' enemies</li> <li>The child will describe an arthropod as having 8 legs (e.g., spider)</li> <li>The child can collect and observe bugs</li> </ul>	Scientific Vocabulary:  Insects Arthropods

		The child will create a bug mask from a paper plate using scraps	
H.	To understand the basic definition of a reptile, its, attributes, and where it lives.	<ul> <li>The child will describe reptiles as cold-blooded animals, which means the body temperature changes with the air around them</li> <li>The child will understand reptiles have scaly skin</li> <li>The child will name a few reptiles:         <ul> <li>✓ Snakes</li> <li>✓ Lizards</li> <li>✓ Turtles</li> </ul> </li> </ul>	Scientific Vocabulary:  Reptile Snake Lizard Mammal  THE YUCKY REPTILE ALPHABET by Jerry Pallotta
1.	To understand what animals need to survive.	<ul> <li>The child will create a pet journal describing how he/she cares for his/her pet</li> <li>The child will dramatize common animal pet behaviors</li> <li>The child will create a graph showing what type of pets they have</li> <li>The child will create a Venn diagram showing what pets need air, water, food, and shelter</li> <li>The child will discuss and compare what people and animals need to survive</li> <li>The child will go on a nature walk outside and observe and collect data to discover where animals may live: under rocks, logs, piles of dead leaves, in trees, bark, stems, and foundations of buildings</li> </ul>	Scientific Vocabulary:  Air  Water  Shelter  Food  Space  Read:  BIRDS BUILD NESTS by  Yvonne Winer
J.	To name animals that can fly, swim, or move on land.	<ul> <li>The child will make a list of animals that can fly</li> <li>The child will describe how a fish uses fins to swim and a bird uses wings to fly</li> <li>The child will make a bird feeder from a milk container and observe birds to learn about their behaviors and needs</li> <li>The child will classify animals according to their movement</li> <li>The child will discuss how wings and fins are alike and different</li> <li>The child will discuss the difference between a bird and fish habitat</li> <li>The child will describe a reef as being made of rock, sand or coral which is made up of many tiny animals called coral polyps</li> <li>The child will understand that many fish live in a reef</li> <li>The child will describe how the sea creatures around the coral reef blend in with the colorful reef to hide from predators; this is called camouflage</li> </ul>	Scientific Vocabulary:  Wings Fins Reef Camouflage  Read: THE MOUNTAIN THAT LOVED A BIRD by Alice McLerran
K.	To explore how animals protect themselves in their environment.	<ul> <li>The child will understand an animal is camouflaged when its color helps it blend in with its habitat</li> <li>The child will name common animals that use camouflage to stay safe: clownfish, fawn; moth;</li> </ul>	Scientific Vocabulary:  Camouflage  Read:  HOW ANIMAL BABIES

		•	butterfly The child will name ways animals stay safe from predators (e.g., quills on a porcupine; turtle's shell; baby kangaroo in mother's pouch) The child will create with a partner a camouflage collage using paper and crayons The child will create animals with play dough	STAY SAFE by Mary Ann Fraser
L.	To describe how animals grow and change as they mature.	•	The child will discuss how various animals and living things grow and change The child will discuss and draw the cycle of living things The child will make a book showing how the life cycle of the caterpillar The child will draw a picture of how he/she has changed since being a baby	Scientific Vocabulary: Grow Change Read: Make Way for Ducklings by Robert McCloskey The Hungry Caterpillar by Eric Carle
M.	To explore the relationships between people and animals.	•	The child will describe the variation and diversity of living things  The child will describe how people are alike and different from other living things  The child will use blocks to create a model of a farm adding tools, food, and other necessities for animals to live on the farm	Read: THE YEAR AT MAPLE HILL FARM by Alice and Martin Provensen

## IV. PHYSICAL SCIENCE **KINDERGARTEN**

**STANDARD**: The child will explore physical science using his/her senses and a variety of tools and simple measuring devices to gather information, to investigate materials, to discuss common properties, differences, and comparisons among three different states of matter: liquid, solid, and gas.

STANDARD: The child will explore motion through playful experiments to test observations and draw conclusions on how things move.

STUDENT OBJECTIVE		ENABLING OUTCOMES			EESSMENT/ TENT NOTES
exp he/	explore identify and blore the ways /she can use and ange paper and cloth.	• The call the total call the	ne child will make a graph observing and comparing the following can be bent, folded, torn, or cut:  Paper Cloth  ne child will make a paper chain to show how paper in be bent to make a chain  ne child will brainstorm and find items or objects ade of paper or cloth in the classroom and place item on a graph showing if they were: bent, folded, irn, or cut to become what they are now ne child will understand how paper is recycled	o o o Read:	•

the use reso	edentify and explore ways he/she can and change natural ources such as wood metal.	classifying if an object is made of metal or wood (e.g., stapler, pencil, block, etc.)  The child will sort and count different types of screws and metal objects.  The child will make a book showing how we use wood and meta  The child will create a sculpture using wood and wire The child will manipulate different forms of metal to make an interesting art piece	Scientific Vocabulary:
natu com and	dentify that clay is a gral resource that less from the earth that he/she can hipulate it to make gs.	clay and observe and communicate how it feels, how it can change, and how it smells  The child will make patterns with play dough or clay The child will use describe words to describe how clay/play dough feels: soft; gooey; wet; warm; cold; soft	Scientific Vocabulary: Clay Read: THE POT THAT JUAN BUILT by Nancy Andrews-Goebel *Recipe for Baker's Clay: 4 cups of flour 1 cup of salt 1½ cups water Preheat oven to 350 degrees. Mix the flour salt, water. Knead dough as desired. Bake at 350 degrees for 1 hour.
natu expl	dentify water as a ural resource and lore the properties changing states of er.	of an ice cube from solid to liquid.  The child will investigate what happens when water is mixed with food coloring and placed in a freezer.  The child will investigate and record the weight of a pitcher of water as more, less, or the same as a:  Book Pencil Block.  The child will identify the sources of water: clouds, snow, ice, air, and water.  The child will explore different objects noting on a graph if they can sink or float.  The child will identify what will happen when water is heated or frozen.	Scientific Vocabulary: Solid Liquid Gas Sink Float  DOWN COMES THE RAIN by Franklyn M. Branley
	ecognize that els affect speed	The child will observe and discuss how certain objects and things move: train, car, wind-up toy, toy truck,	Scientific Vocabulary:

	and motion and make moving easier.	<ul> <li>roller skates, skate board, and sled.</li> <li>The child will sort different cards showing how they move.</li> <li>The child will name and list things that have wheels.</li> <li>The child will make roads and ramps in the block area to communicate how different sizes and more materials make the vehicle move slower or faster.</li> <li>The child will make a simple ramp and measure the distance the toy car travels and record observations in a journal.</li> <li>The child will experiment with a pulley to observe, infer, and draw a conclusion if it makes moving easier.</li> </ul>	Pulley  Read:  MAMA ZOOMS by  Jane Cowen-Fletcher
F.	To explore ways objects move and forces that cause movement.	<ul> <li>The child will sort geometric solids to predict, compare, and infer if they roll or slide.</li> <li>The child will describe how toys move: a top –spins; a marble – rolls; a toy car is pushed; etc.</li> <li>The child will observe, predict, investigate, compare, and infer if certain things roll or slide: e.g., crayon, plastic cup, ball, square block, etc.</li> <li>The child will sort and classify things that roll and slide.</li> <li>The child will make a graph showing things in the classroom that can be pushed or pulled.</li> <li>The child creates a class book about TOYS THAT MOVE.</li> </ul>	Scientific Vocabulary"  Slide Roll Push Pull Force  Read: CINNAMON'S DAY OUT by Susan L. Rothe
G.	To describe sounds and understand how they are made.	<ul> <li>The child will close his/her eyes predicting if the sound heard is loud or soft.</li> <li>The child will make sound patterns with common musical instruments.</li> <li>The child will look at pictures of common environmental sounds and tally if they are loud or soft.</li> <li>The child will understand that sound is made from vibrations.</li> <li>The child will create a music box by decorating a tissue box and slipping three or four different widths and lengths of rubber bands to investigate the sounds made by vibrations.</li> </ul>	Scientific Vocabulary:  Vibration  Loud  Soft  THE LISTENING WALK by Paul Showers  SOUND EXPERIEMENTS by Ray Broekel
H.	To recognize that magnets can be used to make some objects move without being touched	<ul> <li>The child will discover and record magnetic and nonmagnetic items taking a walk around the classroom.</li> <li>The child will use one-to-one correspondence to compare the number of paperclips that can be picked up with different various types of magnets.</li> <li>The child will predict, observe, investigate, and measure how far a magnet can pull objects.</li> </ul>	Scientific Vocabulary:  Magnet  MICKEY'S MAGNET  by Franklyn M. Branley  and Eleanor K.  Vaughan



#### **KINDERGARTEN – SOCIAL STUDIES**

#### I. CULTURE

"Social studies programs should include experiences that provide for the study of culture and cultural diversity." National Curriculum Standards for Social Studies

**STANDARD:** The child will explore concepts of likenesses and differences among cultural groups through school subjects such as language arts, mathematics, science, music, and art.

**STANDARD:** The child will identify elements of culture that allows for the study of people, places, and environment among cultural groups across time and place and through cultural celebrations through experience, observation, and reflection.

Please note: The National Council for Social Studies gives an updated list of books and references for all grade levels each year in all areas of the standards. This resource can be found: <a href="http://www.ncss.org/resources/notable">http://www.ncss.org/resources/notable</a>

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will identify herself/himself as an individual.	<ul> <li>The child will recognize that he/she is an individual and no one else is like him/her.</li> <li>The child will draw a self-portrait and list his/her special talents.</li> <li>The child will dictate a prayer of thanking God for a unique trait of him/herself (talented artist, athletic ability, sense of humor etc.).</li> </ul>	Su Box <u>You are very</u> <u>Special</u> 2000  Marian Wright Edelman <u>I Can Make A</u> <u>Difference</u> 2005
В.	The child will recognize herself/himself as a member of a family.	<ul> <li>The child will draw and label members of his/her family.</li> <li>The child will graph and compare how families vary in size and composition.</li> </ul>	
C.	The child will describe herself/himself as a member of a family who has the same human needs as others.	<ul> <li>The child will create a family flag showing all families need: food, shelter, and love.</li> <li>The child will investigate, compare, and contrast families around the world.</li> <li>The child will create a booklet sharing family customs and traditions.</li> <li>The child will share family stories, traditions, and customs evidenced by pictures and other personal artifacts.</li> </ul>	Vocabulary words: heritage, customs, traditions
D.	The child will understand that heritage is reflected through the arts,	<ul> <li>The child will have the opportunity to invite a family member to share customs, traditions and celebrations to develop cultural awareness.</li> <li>The child will create a Venn diagram to show how</li> </ul>	

customs, traditions, family celebrations and	family celebrations are shared among various cultures.
language.	The child will learn different cultural dances to celebrate different cultures.
	The child will celebrate different Christmas traditions around the world noting likes and differences.

#### II. TIME, CONTINUITY, AND CHANGE

"Social studies programs should include experiences that provide for the study of the past and its legacy." National Curriculum Standards for Social Studies

**STANDARD:** The child will locate herself/himself in time and space. Historical thinking begins for the early learner with a clear sense of time – past, present, and future – and becomes more precise as the child progresses. Historical thinking includes skills such as locating, researching, analyzing, and interpreting primary and secondary sources so that the child can begin to understand relationships among events and draw conclusions.

**STANDARD:** the child will recognize that stories can be told in different ways, describing events that happened today or yesterday through the use of children's literature.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will associate	•	The child will use and respond to language of time as	For diverse learners
	words with time that		related to daily schedules and routines such as:	resources based on
	are meaningful in the		✓ day	the Universal Design
	context of daily		✓ night	for Learning principles
	classroom routines.		✓ yesterday	are available at
			✓ today	www.cast.org.
			√ tomorrow	
			✓ next	
			✓ before	
			√ soon	
			✓ after	
			✓ now	
			✓ later	
		•	The child will record classroom events and	
			experiences on a monthly calendar.	
		•	The child will differentiate between broad categories	
			of historical time:	
			✓ long,	
			✓ long ago,	
			✓ yesterday,	
			✓ today,	
			✓ tomorrow,	
			✓ past,	
			✓ present,	
			✓ future.	
B.	The child will develop	•	The child will use photos and artifacts to illustrate	
	an understanding of		personal stories.	

	chronology by using the language of time to share personal episodes and talk about personal memorabilia.	<ul> <li>The child will use growth charts to show how he/she has changed over time.</li> <li>The child will use technology, (with teacher assistance), throughout the year to record or document herself/himself and family members from the beginning to the end of the year.</li> <li>The child will use the calendar to show passage of days of the week and months to authentic manner and to schedule and plan events.</li> <li>The child will keep track of important dates using a calendar to create a record of classroom history. (i.e., Today, Sept. 8, 2011 is Sally's 5<sup>th</sup> birthday.)</li> </ul>	
C.	The child will understand that personal history can be shared through stories and pictures.	<ul> <li>The child creates a book about him/herself using photos, drawing and writing samples to show his/her personal life history from birth, toddler and kindergartner.</li> </ul>	

#### III. PEOPLE, PLACES, AND ENVIRONMENTS

"Social studies programs should include experiences that provide for the study of people, places and environments." National Curriculum Standards for Social Studies

STANDARD: The child will understand the relationship between people around the world and the physical world.

**STANDARD:** The child will draw upon immediate personal experiences in his/her neighborhood, town or city, and state, as well as peoples and places distant and unfamiliar, to explore geographic concepts and skills. Spatial thinking examines the relationship among peoples, places and environments by mapping and graphing geographic data. Geographic data are compiled, organized, stored and made visible by using traditional and geospatial technologies.

**STANDARD:** The child will access, read, interpret and create maps and other geographic representations as tools of analysis to study global connections and interdependence.

STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A. The child will use terms related to location, direction and distance in understanding relative location (the location of a place in relation to other places).	<ul> <li>The child will use location vocabulary during daily routines, classroom experiences, and play. The words are examples of location vocabulary:</li></ul>	

		The child will give directions using relative location terms.	Suggested games: Simon Says
В.	The child will relate terms related to direction and distance, as well as symbols and landmarks, can be used to talk about relative location of familiar places.	<ul> <li>The child will take a walk and describe relative location of familiar places incorporating directional vocabulary when describing:         <ul> <li>✓ The location of his/her house,</li> <li>✓ The location of his/her school,</li> <li>✓ The school playground,</li> <li>✓ The hospital and more.</li> </ul> </li> <li>The child will use a pictorial map or drawing of the community to locate familiar places.</li> <li>The child will identify and use symbols such as letters, numbers, logos, street signs and addresses as well as landmarks like hospitals, schools, fire departments, etc., to talk about relative location.</li> <li>The child will provide directional clues to find an item or building on the map.</li> <li>The child will draw a simple map showing the location of his her house.</li> </ul>	Suggested activity: I Spy
C.	The child will recognize that he/she is a member of a group.	<ul> <li>The child will name different groups: family, groups of friends, members of the kindergarten, boys, girls, etc.</li> </ul>	
D.	The child will identify characteristics of groups and organize them by similarities.	<ul> <li>The child will organize groups by age.</li> <li>The child will organize groups by physical characteristics.</li> <li>The child will create a booklet organizing classmates by favorite games, pets, or how many siblings are in their families.</li> <li>The child will locate a place on the globe where people may dress or speak differently from himself/herself.</li> <li>The child will discuss how people may have different ideas, eat different foods, or enjoy different types of dances.</li> </ul>	
E.	The child use models or maps to represent real places.	<ul> <li>The child will use a variety of materials to create models or maps of his/her:         ✓ classroom,         ✓ playground,         ✓ neighborhood.</li> <li>The child will draw a globe showing that a globe is a model of the earth.</li> <li>The child will build with blocks of model of his/her town/city.</li> <li>The child will locate on a pictorial map a particular building or feature on the pictorial map.</li> </ul>	
F.	The child will recognize places in the immediate	<ul> <li>The child will identify features on a globe such as: mountains, rivers, and hills.</li> </ul>	CD: My First Amazing World Explorer DK

	environment specific physical and human-made features.	•	The child will identify on a map streets, buildings, and parks.	Multimedia Windows and Mac
G.	The child will discuss the role of transportation in a community.	•	The child will name different forms of transportation as a means of traveling from place to place.  The child will graph ways in which classmates travel to school.	
H.	The child will describe how people around the world adapt to their immediate environment.	•	The child will draw the appropriate clothing to be worn for the different seasons.  The child will compare clothing worn in Africa to clothing worn in the USA.	Mem Fox Shoes From Gandpa 1989
I.	The child will relate terms related to direction and distance, as well as symbols and landmarks, can be used to talk about relative location of familiar places.	•	The child will take a walk and describe relative location of familiar places incorporating directional vocabulary when describing:  ✓ The location of his/her house, ✓ The location of his/her school, ✓ The school playground, ✓ The hospital and more.  The child will use a pictorial map or drawing of the community to locate familiar places.	

## IV. INDIVIDUAL DEVELOPMENT AND IDENTITY

"Social studies programs should include experiences that provide for the study of individual development and identity." National Curriculum Standards for Social Studies

**STANDARD:** The child will develop his/her personal identity in the context of family, peers, school, and community. Central to this development are the exploration, identification, and analysis of how individuals and groups are alike and how they are unique, as well as how they relate to each other in supportive and collaborative ways.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ CONTENT NOTES
A.	The child will identify herself/himself as an individual and as a member of a family that have the same human needs as others.	his, nee cor	e child will make a book identifying members of /her family and the ways they meet their human eds for food, clothing, shelter, and other mmonalities, such as recreation, stories, and sic.	
В.	The child will identify similarities and differences in people, characteristics, habits, etc.	• The	e child will graph classmate's eyes and hair color. e child will make a graph of peers favorite sports or mes.	Suggested activity: "Mystery Voice" - students voices can be recorded on a tape or the computer and students identify each other's unique voice

C. The child will share family stories, traditions, and customs by pictures and personal artifacts.
 The child will share family stories, traditions, and customs by pictures and personal artifacts.
 The child will invite family members to come to the classroom to share traditions and customs.

#### V. INDIVIDUALS, GROUPS, AND INSTITUTIONS

"Social studies programs should include experiences that provide for the study of interactions among individuals. arouns. and institutions." National Curriculum Standards for Social Studies

**STANDARD:** The child will use opportunities given in social studies to influence his/her thinking as he/she examines his/her role in civic participation that embraces the ideal that an individual actively engages in his or her community, church, state, or nation for the common good.

**STABDARD:** The child will practice effective communication skills including negotiation, compromise, and collaboration. Skills in accessing and analyzing information are essential for citizens in democracy.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
Α.	The child will practice cooperative behavior as he/she is introduced to civic participation through group work and play.	<ul> <li>The child will participate in meaningful conversations about the importance of cooperation in a group.</li> <li>The child will create a list of ways he/she can cooperate when working in groups.</li> <li>The child will discuss key words:         <ul> <li>✓ Sharing</li> <li>✓ Taking turns</li> <li>✓ Helping</li> <li>✓ Listening.</li> </ul> </li> <li>The child will use dramatic play or puppets to demonstrate sharing, turn-taking, helping, negotiating, and listening.</li> </ul>	
В.	The child will demonstrate and understanding of individual responsibilities within a group.	<ul> <li>The child will use pictures, symbols, and words next to peers and staff names to depict roles and jobs in the classroom.</li> <li>The child will brainstorm and create a list on the theme: How can we help each other</li> </ul>	Center for the Social Emotional Foundations for Early Learning (CSEFLEL) http://csefel.vanderbuilt.edu/ Follow the link for "Teachers/Caregivers" for free resources about developing social skills in young children. Resources are also available for Parents.
C.	The child will understand that he/she has shared responsibilities toward	<ul> <li>The child will list responsibilities he/she has at home and school.</li> <li>The child will create a chart showing how responsibilities he/she can share those</li> </ul>	

achievement of	responsibilities to achieve common goals.	
common goals in		
homes, schools and		
communities.		

#### VI. POWER, AUTHORITY, AND GOVERNANCE

"Social studies programs should include experiences that provide for the study of how people create, interact with, and change structures of power, authority, and governance."

National Curriculum Standards for Social Studies

**STANDARD:** The child will exercise their individual rights, responsibilities to others, the needs of social groups, and concepts of a just society so he/she can become effective problem-solvers and decision makers. An introduction integrating the seven principals of Catholic social teaching encourages the early learner to be an ambassador of the Good News and to promote positive societal change.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will understand the seven principles of Catholic social teaching.	The child will recognize THE LIFE AND DIGNITY of others by treating others with respect and kindness because God created all people. WE ARE ALL SPECIAL!	A unit on the Seven Principles of Catholic Social Teaching Iforgetta- sheffield@olmschool.c om
В.	The child will participate in civic participation through cooperative problemsolving.	The child will engage in free play and brainstorm rules that will help everyone play well together.	
C.	The child will recognize that coopering includes helping, turn-taking, sharing, comforting, and compromising.	<ul> <li>The child will role-play negotiation skills in everyday situations.</li> <li>The child will work in a group and discuss how he/she can work and play together. The group will create a booklet showing how they will work together.</li> </ul>	
D.	The child will understand that schools and classrooms have rules and routines that govern daily life.	<ul> <li>The child will compare rules in the classroom with rules in families and communities.</li> <li>The child will create rules with positive expectations for behavior in school.</li> <li>The child will assist in posting the rules in strategic parts of the room.</li> <li>The child will define and identify rules within schools and communities.</li> </ul>	
E.	The child will understand that the purpose of rules and authority figures is to provide order, security and safety in the home,	<ul> <li>The child will name authority figures as:         ✓ Parents,         ✓ Teachers,         ✓ Priests and sisters,         ✓ Policemen, etc.</li> <li>The child will discuss how rules are established to</li> </ul>	

	school and community.	•	provide order, security, and safety. The child will graph rules at home, in school, and in our community.	
F.	The child will understand that choices have consequences.	•	The child will use puppets to act out situations that show when we make decisions and choices can result in a consequence.  The child will participate in group meetings to solve a classroom problem and suggest possible solutions.	

### VII. PRODUCTION, DISTRIBUTION, AND CONSUMPTION

"Social studies programs should include experiences that provide for the study of how people organize for the production, distribution, and consumption of goods and services."

National Curriculum Standards for Social Studies

**STANDARD:** the child will investigate, communicate, and recognize that everyone has certain wants and needs. The early learner learns to communicate those wants and to make acceptable decisions about how to satisfy them within the context of family and classroom.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will recognize that people make choices because of unlimited economic wants.	<ul> <li>The child will identify that goods are things that people make and grow.</li> <li>The child will demonstrate an ability to make choices for daily needs and wants.</li> <li>The child will show ways in which wanting something can have an impact on another. (For example, if one child playing in the block corner decides to use all the triangles, no one else can use them.)</li> </ul>	
B.	The child will identify that materials/resources are used to make products.	<ul> <li>The child will name different types of occupations.</li> <li>The child will write a thank you note to local community servants.</li> <li>The child makes a class book of different occupations from A to Z.</li> <li>The child will associate tools, uniforms, and vehicles with the appropriate worker.</li> <li>The child will show through drawings and block building the steps it takes to make a product.</li> </ul>	Judith St. George and David Small <u>So You</u> <u>Want to Be President?</u> Caldecott Medal 2000
C.	The child will identify the goods and services.	<ul> <li>The child will define goods as objects that satisfy people wants.</li> <li>The child will list goods:         <ul> <li>✓ Bicycles,</li> <li>✓ Books,</li> <li>✓ Gasoline,</li> <li>✓ Clothing,</li> <li>✓ And toys.</li> </ul> </li> <li>The child will define services as activities performed by people, firms, or government agencies to satisfy</li> </ul>	

D.	The child will identify how goods are acquired.	economic wants:  Fast food (food service),  Doctors (medical services)  Lawn care business,  Pet sitting business,  Banks,  Auto repair,  And child care.  The child will engage in intentional conversations to define and illustrate goods and services.  The child will demonstrate through dramatic play an understanding of goods and services.  The child will participate in activities as a buyer and seller through the creation of a class store or restaurant.  The child will identify economic activities that use resources in the local region.  The child will identify that coins and bills are money.  The child will identify that money is used to buy goods.	Trips to local apple orchards; local farms; local stores or markets.
E.	The child will make economic decisions as a consumer, producer, saver, investor, and citizen.	<ul> <li>The child will list the differences between the basic needs and wants: food, clothing, and shelter.</li> <li>The child will discuss why people earn, spend, and save money.</li> </ul>	Invite a banker to come and discuss various ways to save money.

### VIII. SCIENCE, TECHNOLOGY, AND SOCIETY

"Social studies programs should include experiences that provide for the study of relationships among science, technology, and society."

National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to understand how science and technologies influence beliefs, knowledge, and their daily lives. The child studies how basic technologies such as telephones, ships, automobiles, rockets, and airplanes have evolved and how we have employed technology such as air conditioning, dams, and irrigation to modify our physical environment and contribute to changes in global health and economics.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A. The child will investigate a inquiry by de question by opposite prompts.	nd initiate veloping a	<ul> <li>The child will complete prompts, "I wonder? Why?         And how is this like this?" as they investigate the development of transportation: trains, ships, airlines, trucking etc.     </li> <li>The child will list ways of communicating with one another and question the progress made in these areas.</li> </ul>	Jane Elliot and Colin King <u>The Usborne</u> <u>Children's</u> <u>Encyclopedia</u> 1998

B.	The child will develop a hypothesis, thesis, or research by identifying resources, observation, and recording observations in areas of science and technologies.	<ul> <li>The child will recognize objects of long ago and today. For example a slate was used long ago and a computer is used today.</li> <li>The child will identify various resources for finding answers to their questions i.e., books, videos, people, technology media.</li> <li>The child will explain what their jobs will be during inquiry investigation:         <ul> <li>✓ Draw pictures of how transportation has changed over the years.</li> <li>✓ Draw and label pictures about our field trip to the airport, train station, bus station, trolley museum, etc.</li> </ul> </li> <li>The child will identify ways he/she will show what he/she has learned by:         <ul> <li>✓ Building with blocks,</li> <li>✓ Drawing a picture,</li> <li>✓ Making a book</li> <li>✓ Developing a time line</li> <li>✓ Completing a puzzle.</li> </ul> </li> </ul>	Faith McNulty If You Decide To Go to the Moon 2005  Bobbie Kalman & Niki Walker Space 1997  CD Sammy's Science House Windows and Mac Edmark  CD Trudy's TIME AND PLACE HOUSE Windows and Mac Edmark  World Book Encyclopedia Presents Space Travel Windows and Mac Multimedia
C.	The child will conduct research by following directions, asking questions, observations, and recording observations.	<ul> <li>The child will follow directions to complete an inquiry.</li> <li>The child will investigate by asking questions and observing.</li> <li>The child will record observations with:         <ul> <li>Words,</li> <li>Numbers,</li> <li>Symbols,</li> <li>And/or pictures. (i.e., drawing or labeling a diagram; creating a title for a drawing or diagram; recording data provided by the teacher in a table.)</li> </ul> </li> </ul>	
D.	The child will develop reasonable explanations that support the research statement.	<ul> <li>The child will organize and display information by using tables, charts, and graphs.</li> <li>The child will analyze evidence by:         <ul> <li>✓ Sorting objects,</li> <li>✓ Justifying groups,</li> <li>✓ Role playing.</li> </ul> </li> </ul>	
E.	The child will make connections to research.	<ul> <li>The child will discuss his/her findings within small groups to investigate if his/her findings answered the research question.</li> <li>The child will propose solutions to the problems.</li> <li>The child will communicate his/her findings using</li> </ul>	

<ul> <li>pictures.</li> <li>The child will share ideas or artifacts with classmates.</li> <li>The child will contribute to a written story when researching a particular fact in history.</li> </ul>	
<ul> <li>The child will differentiate among fact, opinion, and interpretation when sharing stories or retelling events.</li> </ul>	

#### IX. GLOBAL CONNECTIONS

"Social studies programs should include experiences that provide for the study of global connections and interdependence." National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to use various media and apply first-hand experiences to become aware of how things might happen in one part of the world and impact other parts of the world. Within this context, the early learner examines and explores various types of global connections as well as basic issues and concerns.

**STANDARD:** The child will develop responsive action plans, such as becoming e-pals with a class in another part of the world.

STUDENT OBJECTIVE	ENABLING OU	TCOMES ASSESSMENT/ NOTES
A. The child will show a understanding of human interaction ventionment over ti	<ul> <li>The child will make a drawing for God's creation.</li> <li>The child will identify ways in care of the environment.</li> <li>The child will identify and list.</li> <li>The child will list ways in whe environment. (i.e., littering)</li> <li>The child will brainstorm was the physical environment at the physical environment at the child will create a bookly clothing, and shelter are based.</li> <li>The child will identify, defining importance of natural resource. ✓ Water,</li> <li>✓ Trees,</li> <li>✓ Soil,</li> <li>✓ Sunlight.</li> <li>The child will help plant a so</li> </ul>	in which he/she will take st recyclable items. hich we hurt our ays he/she can care for t school and home. elet depicting how food, sic needs for humans. he, and discuss the urces:

#### X. CIVIC IDEALS AND PRACTICES

"Social studies programs should include experiences that provide for the study of ideals, principles, and practices of citizenship in a democratic republic."

National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to understand civic ideals and practices through activities such as helping to set classroom expectations, examining experiences in relation to ideals, participating in mock elections, and determining how to balance the needs of individuals and the group. The child will begin to experience views of citizenship in other times and places through stories and drama.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will understand that schools and classrooms have rules and routines that govern daily life.	<ul> <li>The child will compare rules in the classroom with rules in families and communities.</li> <li>The child will create rules with positive expectations for behavior in school.</li> <li>The child will assist in posting the rules in strategic parts of the room.</li> <li>The child will define and identify rules within schools and communities.</li> </ul>	
В.	The child will understand that chronology provides the scaffolding for organizing historical thinking.	<ul> <li>The child will name holidays that are significant in his/her daily life.</li> <li>The child will list the contributions of historical figures such as:         <ul> <li>Christopher Columbus,</li> <li>George Washington,</li> <li>Abraham Lincoln.</li> </ul> </li> <li>The child will make a book recording the contributions of Martin Luther King Jr. and Mother Teresa as role models of Peace.</li> <li>The child will compare Christmas traditions around the world (i.e. Venn)</li> <li>The child will name celebrations and holidays important to the school community.</li> <li>The child will name current civil and church leaders.</li> </ul>	OF THEE I SING: A Letter to My Daughters Obama  Lynne Cheney America A Patriotic Primer 2002  Kate Waters Samuel Eaton's Day A day in the Life of a Pilgrim Boy 1993  Kate Waters Sarah Morton's Day A day in the Life of a Pilgrim Girl 1993
C.	The child will understand that nations are represented by symbols and practices.	<ul> <li>The child will recognize the American Flag as a symbol of the United States.</li> <li>The child will recite the Pledge of Allegiance.</li> <li>The child will learn the National Anthem and God Bless America as common practices of the United States.</li> </ul>	O Datable Con 1 - www Chart Col and \$2110

## **Kindergarten ARTS & MOVEMENT**

**STANDARD:** The child will enjoy the arts through active participation in the process of creating, performing and responding to the arts. Therefore, the arts should be embraced, enhanced, and supported in all areas of the curriculum, especially, music and art.

Content Standard	Performance Standard	Suggested Activities
Movement and Space  The kindergarten program includes experiences that provide opportunities in music and art for the child to develop awareness of different movements of the body, to express music through the movement of different parts of the body, and to discover ways in which each part of the body can move (arms, legs, head, etc.)	The child will:   Demonstrate nonlocomotor movements (such as bend, twist, stretch, swing, sway)  Demonstrate basic locomotor movements (walk, run, hop, jump, leap, slide and skip), traveling forward, backward, sideward, and turning;  Move to a musical beat and respond to changes in tempo;  Identify and demonstrate basic dynamic contrasts (slow/quick, gentle/ strong)	Responds to music (Chopin's Etude in E or The Rite of Spring) by walking like a sprite or a giant, running on tiptoes, skipping lightly, hopping like a rabbit, jumping like a grasshopper, marching like a puppet, swaying like a tree, stretching to touch a star  Experiments with pipe cleaner bodies, making them bend and twist  March, walk, run, hop traveling backward and forward in rhythm to a poem like Shel Silverstein's "Orchestra"  Uses clay to create figures that hop, skip, jump, etc.  Responds to different beats of a drum by moving a different part of his/her body
Melody and Texture  The kindergarten program includes experiences in music and art that develop the child's ability to use his/her senses to distinguish between high and low musical tones and loud and soft sounds; to develop vocal range; and to make melodious sounds by combining high and low sounds; to draw, paint or sculpture what they see, hear, taste, and touch in their world.	The child will:     Use different instruments to produce high and low and soft and loud musical sounds  Sing the musical scale  Sing a variety of age appropriate rhymes, hymns, and songs  Use a variety of art expressions to reflect on his/her world	<ul> <li>Music or musical instruments to stand for high or loud sounds and sit for soft or low sounds</li> <li>Sing the musical scale using nonsense sounds</li> <li>Will sing songs and common nursery rhymes with his/her classmates ("I'm a Little Teapot," "Jesus Loves Me")</li> <li>Responds to Frederick by Leo Lionni (for example) or a painting like Van Gogh's Starry Night by drawing, painting or sculpting the images presented</li> <li>Fills a page with crayon blobs, scratches out images or shapes, and closes his/her eyes and reflects upon the texture they created</li> </ul>
Rhythm and Color  The kindergarten program includes experiences in music and art that develop the child's ability to respond to rhythmic beat and	The child will:  Clap to rhythmic beat of nursery rhymes or marches Relate rhythm to their heart beat, the seasons, and the tides Use color to create original artwork	<ul> <li>Claps to the beat of "Humpty Dumpty,"         "London Bridge" and "Bingo" (to name a few)</li> <li>Draw a picture of their heartbeat, the seasons, and high and low</li> <li>Creates and uses puppets that respond to a variety of music and beats (patterns of growth in nature, metamorphosis, time,</li> </ul>

music and to relate rhythm and color to everyday occurrences in nature and in the universe  Style, Dynamics, and Tempo  The kindergarten program includes experiences in music and art that develop the child's awareness of the variety provided (produced) by the use of soft and loud (dynamics) slow and fast (tempo) sounds.	The child will:  Show how sounds of nature in the environment can be related to sound expressions in music  Contrast two musical pieces	their own daily schedules)  Paints with a Q-Tip while listening to classical music and responding to the rhythms he/she hears  Uses crayon rubbings to create patterns  Identifies sound in music that remind him/her of thunder, a brook, a siren, a whisper  Identifies the changing tempo in a lullaby and a march  Plays a game like "Turn Yourself Into" and dramatizes the wind, rain, thunder, snow, lightening, and sunshine  Listens to recordings of nature or environmental sounds and creates artwork reflective of what he/she hears  Listens to classical music ("Swan Lake" or "The Nutcracker") and uses  common objects (fly swatter, sponge, etc.) to create a Jackson Pollock — like creation
Instrumentation  The kindergarten program includes experiences in music and art that develop the child's ability to appreciate and identify orchestral instruments and how they are used to create rhythm, melody and harmony.	The child will:  Name different musical instrument and demonstrate the sounds they produce  Use instruments to create rhythm, melody and harmony  Show how instruments are used to create sound effects for rhythmic accompaniment	<ul> <li>Creates different musical instruments such as sand blocks, rhythm sticks, shoebox guitars, etc. and relates them to orchestral instruments</li> <li>Connects onomatopoeic words with the sound of particular musical instruments</li> <li>Plays orchestra bingo associating sounds (including nature sounds) with pictured instruments</li> <li>▶ Participates in a musical parade that organizes instruments according to size, sound, or type (percussion, wind, etc.)</li> </ul>
Sounds and Space  The kindergarten program includes experiences in music and art that develop the child's ability to experiment with a variety of sounds, possible usages, and means of notation	The child will:  Mimics sounds he/she hears in the environment (wind, fire, crumpling paper)  Begin to identify high and low sounds in simple (or color coded) written music	<ul> <li>Creates sound boxes to categorize sounds</li> <li>Listens to classical music (<i>The William Tell Overture</i> or <i>Swan Lake</i>) and uses finger paints to express or identify high and low notes</li> <li>Uses classroom instruments to make music from simple written notes (Colorcoded xylophones, guitars, and pianos are great for this.)</li> </ul>
Listening and Form	The child will:   Identify differences and similarities	Listens to musical tones and identifies them as the same or different Listens to a simple melody and draws upward or downward curves as sounds

The kindergarten program includes activities in music and art that foster the child's development of effective listening habits and an appreciation and enjoyment of creative movement.

in tones and melodies

- Respond and react to differences in melodies
- Recognize music they know and like
- Use their bodies to respond to music

varv

- Listens to songs like Pop Goes the Weasel or Good Morning to You and draws musical notes with faces that show how the music makes him/her feel
- \* Names familiar songs as they are heard
- Dances the character or instruments in familiar musical stories like Tubby the Tuba and Peter and the Wolf

# Ages 3 and 4 Curriculum

# Standards



#### **RELIGION – AGES FOUR AND THREE**

#### PROFESSION OF FAITH

#### I. CHURCH

The child will understand that we are friends of Jesus and as his friends we are called the Church.

"I will teach you to bring people in instead of fish. Jesus went all over Galilee, teaching and preaching the good news about God's kingdom." Matthew 4:19:22

Lectionary For Masses with Children

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To discover that our Church family is made	1.	The child will understand we become friends of Jesus through our Baptism.	
	up of the friends of Jesus.	2.	The child will recognize the Church as the family of God.	
		3.	The child will understand God created the Church out of love.	
		4.	The child will name the special people who make up our church family: the pastor, deacons, Ministers of	
			the Eucharist; lectors; and altar servers to name a	
-			few.	
B.	To describe how the	1.	The child will participate in a tour of the church	
	church is a special place		building, identifying and understanding the	
	and sacred place.		significance of :	
			🕆 Tabernacle	
			<b>骨 Altar</b>	
			🕆 Baptismal Font	
			⊕ Sanctuary	

#### I. Doctrine

The child will experience the doctrines of the Church through concrete experiences with many opportunities through aesthetic expression; art, music, movement, and dramatic play.

"You are God's chosen and special people. God has brought you out of darkness into his marvelous light. Now you must tell all the wonderful things that he has done." 1 Peter 2: 9:10

Lectionary for Masses with Children

STUDENT OBJECTIVE			ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To know God is the	1.	The child will recall the story of creation.	
	Creator.	2.	The child will share that all God made is good.	
		3.	The child will describe ways he/she uses his/her	
			senses to learn about what God made.	
В.	To understand God	1.	The child will describe him/herself as a child of God.	
	made people to share	2.	The child will understand his/her own uniqueness.	
	in His love and that	3.	The child will understand his/her name is special and	
	he/she is special.		that God knows each of us by name.	
		4.	The child will appreciate his/her gifts are given by	

			God.	
C.	To know Jesus is God's own Son.	1. 2. 3. 4.	The child will articulate that Jesus is the Son of God. The child will understand that Jesus is our brother. The child will tell that Jesus was born on Christmas. The child will retell the Christmas story.	
D.	To recognize Mary as the Mother of Jesus.	1.	The child will name Mary as the Mother of Jesus, God's own Son.	
E.	To identify the Holy Family.	1.	The child will identify the Holy Family as Jesus, Mary, and Joseph.	

### **CELEBRATION OF CHRISTIAN MYSTERY**

### II. Liturgy/Sacraments

The child will experience and celebrate through prayer and participation the liturgical and sacramental life of the Church.

"With thankful hearts offer up prayers and requests to God. Then because you belong to Christ Jesus, God will bless you with peace that no one will completely understand. And this peace will control the way you think and feel." Philippians 4:8-9

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To understand that as a member of the Church he/she celebrates the life of Jesus by celebrating the following liturgical feasts: Advent, Christmas, Lent, and Easter	2. TI of 3. TI 4. TI as 5. TI fc 6. TI 7. TI nn 8. TI	he child will understand that Advent is a time of vaiting for Jesus to come. he child will identify the Advent wreath as a symbol of the four weeks in preparation for Christmas. he child will retell the Christmas story. he child will identify the Magi, who honored Jesus, as the Son of God and Son of Mary. he child will describe Lent as a time to grow in love for God and others. he child will understand that God gives us symbols of new life in preparation for Easter. he child will understand that Easter is a time for ew life bursting forth within us. he child will recognize Jesus rose from the dead on aster Sunday.	
В.	To understand we honor Mary and celebrate special days to show our love for Mary.	bi	he child will understand that everyone has a irthday and we celebrate Mary's birthday on eptember 8.	
C.	To name Baptism as a sacrament.	of 2. Th	he child will recognize the symbol for the sacrament f Baptism is water. he child will recall that at his/her Baptism he/she ecame a member of the Church.	

#### LIFE IN CHRIST

### III. Scripture

The child will treasure God's word as it is integrated into daily instruction, reflection, sharing, and prayer.

"Then he opened their minds to understand the scriptures." Luke 24:27

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To understand the Bible tells us stories about Jesus.	1.	The child will understand that the Bible is the Church's holy book. The child will recognize we hear stories from the Bible at church, at school, and at home.	
В.	To recognize familiar gospel stories: the birth of Jesus; Jesus as the Good Shepherd; and the Easter Story.	1. 2. 3.	The child will retell the Christmas story. The child will give examples of how Jesus is a Good Shepherd. The child will dramatize the Easter story.	

### IV. Morality/Family Life

The child will understand that he/she is a steward who cares for God's world. We have the responsibility to care for and to protect our planet, its people, and its resources.

"Let all who live in God's world care for it." Psalm 33:8

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To understand his/her responsibility to care	1.	The child will list ways he/she can take care of God's world.	
	for God's world.	2.	The child will know when he/she cares for God's world he/she shows love for God.	
		3.	The child will make a collage showing ways he/she takes care of God's world.	
		4.	The child will make a poster showing how he/she can help for the classroom.	
		5.	The child will discuss how recycling helps the earth's resources.	
В.	To understand our	1.	The child understands that everyone has a family.	
	family loves and cares for us.	2.	The child recognizes a baby is a special gift from God to a family.	
		3.	The child acts out ways families helps and cares for each other.	
		4.	The child composes a prayer thanking God for his her family.	

### V. Catholic Social Teachings

The child will be invited to become an ambassador of the GOOD NEWS by imitating Jesus, as a great role model.

"Before I formed you in your mother's body I chose you. Before you were born I set you apart to serve me." 
Jeremiah 1:5

	STUDENT ORIECTIVE	ACCECCMENT/ NOTES	
	To recognize the life	ENABLING OUTCOMES  1. The child will understand that we are all special	ASSESSMENT/ NOTES
A.	To recognize the life and dignity of others by treating others with respect and kindness because God	<ol> <li>The child will understand that we are all special.</li> <li>The child will graph ways in which we are all alike and different.</li> <li>The child will list ways in which he/she sees, hears, tastes, and thinks for himself/herself.</li> </ol>	
	created all people.	<ol> <li>The child will recognize his/her own dignity by creating a class tree listing his/her gifts.</li> </ol>	
В.	To promote justice and love by sharing his/her life with his/her family and community by giving to others and taking care of his/her neighbors.	<ol> <li>The child will identify Jesus as a friend.</li> <li>The child understands that Jesus gives us friends and family to make us happy and to help us.</li> <li>The child will reach out to members of his/her community by collecting clothes for the poor.</li> <li>The child will show concern for his/her community by collecting pennies to assist the poor.</li> <li>The child will make card a welcome card for babies baptized in the parish.</li> <li>The child will give two toys away to the poor or homeless each time he/she receives a new toy.</li> </ol>	
C.	To value the rights of others and take care of the property of others.	<ol> <li>The child will name the universal needs of all people: food, work, clothes, a home, and a school.</li> <li>The child will name the fruits of the Spirit as the virtues, recognized by all faiths and cultures of the world.         <ol> <li>The fruits of the Spirit are: love, joy, peace, self-control, kindness, patience, and gentleness.</li> </ol> </li> </ol>	
D.	To acknowledge that the poor and helpless are entitled to life's necessities: food, clothing, and housing	<ol> <li>The child will learn about saints that cared for the poor and helpless.</li> <li>St. Francis of Assisi</li> <li>Katherine Drexel</li> <li>The child will make thank you notes to volunteers at a local soup kitchen.</li> <li>The child will bring canned goods for the local food pantry.</li> <li>The child will participate in the Lenten Rice Bowl campaign.</li> <li>The child will share and role play stories of saints.</li> </ol>	
E.	To protect God's creation by understanding that he/she will make the	<ol> <li>The child will make a list of ways he/she can help clean-up at playtime.</li> <li>The child will help water plants and care for classroom pets.</li> </ol>	

	world a better place respecting the dignity of work and the rights of all workers.	<ul><li>3.</li><li>4.</li><li>5.</li><li>6.</li></ul>	The child will build a replica of his/her town with blocks.  The child will create a school newspaper. He/she will interview community helpers and write about them in the newspaper.  The child will invite his/her parent to come to school and talk about his/her job.  The child will role-play a community helper and have classmates guess which one.	
F.	To welcome all people because we are united in solidarity as children of God and care for one another.	1. 2. 3. 4. 5.	The child will practice solidarity by naming ways he/she can treat classmates as a member of God's family.  The child will list his/her special gifts.  The child will list ways to resolve conflicts.  The child will read books about different cultures.  The child will celebrate different cultures by learning different dances from countries around the world.  The child will celebrate United Nations Day on October 24 with a Parade of Nations.	
G.	To reverence and care for God's creation by cherishing the environment as God's sacred creation.	1. 2. 3. 4. 5.	The child will celebrate the feast of St. Francis.  The child will take a BAG WALK and collect liter.  The child will celebrate Earth Day by writing a prayer of thanksgiving for all of God's creation.  The child will help recycle in the classroom.  The child will recognize that some of God's gifts of nature are present in the sacraments:   water -Baptism  olive oil -chrism - Holy Orders and Confirmation  wheat and grapes - in the Eucharist  oil - the Anointing of the Sick	

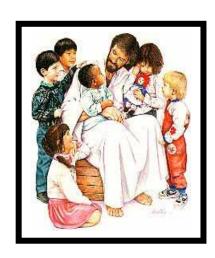
### VI. Prayer

The child will deepen his/her experiences to be ready to live, pray and celebrate as members of God's family.

### Dance, sing, and pray with a joyful heart.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To understand prayer is listening to God.	1. 2. 3. 4.	The child will pray different kinds of prayer through teacher modeling: adoration, petition, and thanksgiving.  The child will pray in his/her own words.  The child articulates he/she can pray any place and any time.  The child will make a prayer book.	
В.	To show how Jesus teaches how to pray.	1.	The child will understand Jesus taught us the Our Father.	

		2.	The child will recite the Our Father.	
C.	To pray the Sign of the Cross, the Our Father, and the Hail Mary.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	The child will make and pray the Sign of the Cross with teacher modeling. The child will recite the Our Father with teacher direction. The child will recite the Hail Mary with the teacher.	
D.	morning, mealtime, and night payers are important. mealtime, and night payers are creation.  2. The child will describe		The child will understand that he/she prays morning, mealtime, and night prayers in thanksgiving for God's creation.  The child will describe that he/she prays to God to ask for help and blessings for the day.	



### **THE CHILD AT FOUR – LITERACY DEVELOPMENT**

#### I. ORAL LANGUAGE

**STANDARD:** The child will communicate their experiences, ideas, and feelings by speaking. **STANDARD**: The child will listen with understanding to directions, conversations and stories.

To:  A. Speak clearly including use of appropriate tone and inflection.  B. Use complex sentences and vocabulary to describe ideas, feelings, and actions.  C. Speak to initiate or enter into a play situation and speak for a  The child:  Speaks dominant language clearly  Uses indoor voices  Uses sentences with two or more separate ideas connected by words such as "and" or "but"  Takes different roles in dramatic play and puppetry	ST	TUDENT OBJECTIVES		ENABLING OUTCOMES	ASSESSMENTS/NOTES
variety of other purposes.  D. Demonstrate understanding of basic conversational vocabulary  E. Demonstrate understanding of message in conversation  F. Participate appropriately in extended conversational exchange  G. Connect ideas with words like "then, next, and because"  H. Use correct sentence structure  I. Speak for a variety of purposes  J. Engage in dialogue and role play K. Formulate and ask questions  L. Name primary and secondary colors.  M. Comprehend and take part in discussions of less predictable stories and nonfiction selections  N. Retell information from a story  O. Repeat a sequence of three to five words  P. Listens to and follows oral directions	A. Speak appro B. Use covocab feeling C. Speak play sivariet D. Demo basic of extend excha G. Conne "then, H. Use coll. Speak J. Engag K. Formula L. Name colors M. Comp discussionies N. Retell O. Repeat five w P. Listen	k clearly including use of oppriate tone and inflection. omplex sentences and oulary to describe ideas, gs, and actions.  A to initiate or enter into a dituation and speak for a cry of other purposes.  Onstrate understanding of conversational vocabulary onstrate understanding of age in conversation cipate appropriately in ded conversational lange ect ideas with words like and, next, and because" or extractions of purposes ge in dialogue and role play ulate and ask questions are primary and secondary so the primary and secondary so t	•	Speaks dominant language clearly Uses indoor voices Uses sentences with two or more separate ideas connected by words such as "and" or "but" Takes different roles in dramatic play and puppetry Asks questions of teachers and peers Takes at least two turns talking to adults or peers: responses are brief but related to the speaker's prior comments Shares personal experiences Repeats familiar short poems, rhymes or songs Describes objects, events, feelings, etc. with details and examples Follows directions Role plays appropriately Acts out one of the related ideas in a story Follows simple verbal one-and two-	ASSESSMENTS/NOTES

II. VISUAL PERCEPTION

**STANDARD:** The child will develop visual perception.

STUDENT OBJECTIVES	ENABLING OUTCOMES	ASSESSMENTS/NOTES
To:  A. Identify some colors and shapes B. Recognize his/her name C. Identify the concepts of top, middle, bottom, front and back D. Recognizes some labels and symbols E. Reproduces visual sequential patterns	Names the color or shape of an object in a picture book     Names shapes in environment     Names letters in his/her name and identifies those letters with other words     Plays directional games     Puts materials in a box identified	ASSESSMENTS/NOTES
F. Interprets pictures	<ul> <li>as his/her own</li> <li>Goes to centers identified by labels</li> <li>Reproduces patterns using pattern cards</li> <li>Describes blocks as bigger, smaller, red, etc.</li> <li>Tells stories from pictures</li> </ul>	

### III. PHONEMIC AWARENESS

**STANDARD:** The child will develop phonemic awareness.

STUDENT OBJECTIVES		ENABLING OUTCOMES	ASSESSMENTS/NOTES
To:	Respond to presence or absence	The child:  • Identifies common sounds in	
	and/or location of sounds and other sound characteristics	rhyming words  Orally produces rhyming words	
В.	Name gross differences in sound characteristics; i.e. loud or soft, fast or slow	<ul> <li>Identifies the rhyming parts of words in common nursery rhymes and songs</li> </ul>	
C.	Name a variety of environmental sounds with their associated pictures	Identifies spoken words with similar initial sounds	
D.	Use imitative and creative expression in the recall of poems and role play	<ul> <li>Identifies in common objects         whether the sound is loud or         soft, hard or soft</li> <li>Identifies harsh sounds</li> </ul>	
E.	Recognize matching sounds and some printed letters	Matches animals and objects to the sounds they make	
F. G.	Recognize several printed words Identify the number of syllables	Identifies both uppercase and lowercase letters of the	

in two-syllable words	alphabet
	<ul> <li>Recognizes familiar letter-sound relationships</li> <li>Claps syllables in two-syllable words</li> </ul>

### IV. PROBLEM SOLVING AND CRITICAL THINKING

**STANDARD:** The child will master language and expressive skills necessary for problem solving and critical thinking.

STUDENT OBJECTIVES	ENABLING OUTCOMES	ASSESSMENTS/NOTES
То:	The child:	
A. Describe and compare experiences and events	<ul> <li>Describes family vacations and compares these with story</li> </ul>	
B. Describe unique characteristics of self and own culture	<ul><li>characters and classmates</li><li>Uses dramatic play to describe</li></ul>	
C. Compare and contrast people and objects	and compare personal experiences	
D. Use simple phrases and sentences to express personal observations	<ul> <li>Describes family customs</li> <li>Contributes to classroom journal and field trips</li> </ul>	
E. Use simple phrases and sentences to think through and solve problems	<ul> <li>During story time, tells what he/she would do if faced with the conflict or events of the story</li> </ul>	
F. Recognize the relationships between objects and words	<ul><li>Completes simple analogies</li><li>Solves simple riddles</li></ul>	

### V. READING STRATEGIES

**STANDARD:** The child will exhibit interest in reading.

STUDENT OBJECTIVES		ENABLING OUTCOMES		ASSESSMENTS/NOTES
To:		The chi	ild:	
A.	Match words to some objects, people and actions	•	Chooses books or reading activities during learning center	
В.	Retell information from a story using words, pictures, and objects	•	time Looks at pictures and tries to read	
C.	Show interest in reading-related	•	Listens to stories	

activities  D. Attend to a story  E. Demonstrate book awareness  F. Recognize printed letters  G. Demonstrate an understanding that print is what conveys the story or meaning  H. Demonstrate independent interest in reading-related activities  Points out names that begin with the same letters  Identifies repeated sounds in stories  Identifies rhyming words in nursery rhymes  Points out letters in print  Generates rhymes and/or similar					
<ul> <li>E. Demonstrate book awareness</li> <li>F. Recognize printed letters</li> <li>G. Demonstrate an understanding that print is what conveys the story or meaning</li> <li>H. Demonstrate independent interest in reading-related activities</li> <li>Demonstrate independent interest in reading-related interest in reading-related activities</li> <li>Demonstrate an understanding and left to right</li> <li>Points to printed words as he/she pretend reads</li> <li>Points out names that begin with the same letters</li> <li>Identifies repeated sounds in nursery rhymes</li> <li>Points out letters in print</li> </ul>		activities	•	Holds book upright and turns	
<ul> <li>F. Recognize printed letters</li> <li>G. Demonstrate an understanding that print is what conveys the story or meaning</li> <li>H. Demonstrate independent interest in reading-related activities</li> <li>Scans pages from top to bottom and left to right</li> <li>Points to printed words as he/she pretend reads</li> <li>Points out names that begin with the same letters</li> <li>Identifies repeated sounds in stories</li> <li>Identifies rhyming words in nursery rhymes</li> <li>Points out letters in print</li> </ul>	D.	Attend to a story		pages staring at the front of the	
<ul> <li>G. Demonstrate an understanding that print is what conveys the story or meaning</li> <li>H. Demonstrate independent interest in reading-related activities</li> <li>activities</li> <li>activities</li> <li>and left to right</li> <li>Points to printed words as he/she pretend reads</li> <li>Points out names that begin with the same letters</li> <li>Identifies repeated sounds in stories</li> <li>Identifies rhyming words in nursery rhymes</li> <li>Points out letters in print</li> </ul>	E.	Demonstrate book awareness		book	
that print is what conveys the story or meaning  H. Demonstrate independent interest in reading-related activities  • Points to printed words as he/she pretend reads  • Points out names that begin with the same letters  • Identifies repeated sounds in stories  • Identifies rhyming words in nursery rhymes  • Points out letters in print	F.	Recognize printed letters	•	Scans pages from top to bottom	
story or meaning  H. Demonstrate independent interest in reading-related activities  Points out names that begin with the same letters  Identifies repeated sounds in stories  Identifies rhyming words in nursery rhymes  Points out letters in print	G.	Demonstrate an understanding		and left to right	
H. Demonstrate independent interest in reading-related activities  • Points out names that begin with the same letters • Identifies repeated sounds in stories • Identifies rhyming words in nursery rhymes • Points out letters in print		that print is what conveys the	•	Points to printed words as he/she	
interest in reading-related activities  the same letters  Identifies repeated sounds in stories  Identifies rhyming words in nursery rhymes  Points out letters in print		story or meaning		pretend reads	
<ul> <li>activities</li> <li>Identifies repeated sounds in stories</li> <li>Identifies rhyming words in nursery rhymes</li> <li>Points out letters in print</li> </ul>	Н.	Demonstrate independent	•	Points out names that begin with	
stories  Identifies repeated sounds in stories  Identifies rhyming words in nursery rhymes  Points out letters in print		interest in reading-related		the same letters	
<ul> <li>Identifies rhyming words in nursery rhymes</li> <li>Points out letters in print</li> </ul>		activities	•	Identifies repeated sounds in	
nursery rhymes  • Points out letters in print				stories	
Points out letters in print			•	Identifies rhyming words in	
· · · · · · · · · · · · · · · · · · ·				nursery rhymes	
Generates rhymes and/or similar			•	Points out letters in print	
•			•	Generates rhymes and/or similar	
beginning sounds in play				beginning sounds in play	
Plays with words creating			•	Plays with words creating	
nonsense words				nonsense words	

### VI. READING COMPREHENSION

**STANDARD:** The child will use appropriate strategies before, during, and after reading in order to construct meaning.

STUDEN	NT OBJECTIVES	ENABLING OUTCOMES	ASSESSMENTS/NOTES
То:	BEFORE READING	The child:	
A.	Set a context, using pre-reading strategies, such as predicting, picture walks, activating prior knowledge/connections and questioning	<ul> <li>Takes picture walks, predicts, and questions before reading</li> </ul>	
В.	Activate prior knowledge to aid comprehension of fiction and nonfiction texts		
C.	Predict outcomes based on clues in a text by answering teacher-led questions		
	DURING READING		
D.	Ask questions when things do not make sense	<ul> <li>Makes related comments about the story</li> </ul>	
E.	Create pictures that represent thoughts from read-aloud or	<ul><li>Identifies characters in a story</li><li>Makes connections to personal</li></ul>	

F. G.	shared readings  Make connections between text and self  Make predictions	experiences or other stories	
H. I. J. K.	AFTER READING Answer "who, what, when, where, why, and how" questions about the characters, setting, plot, theme, conflict, and point of view in a story Retell information from a story Identify the characters in a story Draw conclusions after listening to a story Recognize there are different text structures	<ul> <li>Retells one or two main events in a story</li> <li>Makes connections to story from personal life or other stories</li> <li>Responds to stories with appropriate emotion</li> <li>Draws their favorite part of a story and tells why</li> </ul>	

### VII. WRITTEN LANGUAGE

**STANDARD:** The child will use different forms of writing such as drawing, letter-like forms, invented spelling and conventional forms.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENTS/NOTES
To:	Use symbols or drawings to	<ul><li>The child:</li><li>Uses crayons, markers, pencils,</li></ul>	
	express thoughts, feelings, and ideas	etc to write messages using letter-like shapes and some	
В.	Print or copies first name	conventional letters	
C.	Dictates simple labels for illustrations of objects, characters and actions	<ul> <li>Uses pretend writing and some letter-like shapes to convey meaning</li> </ul>	
D.	Uses pictures to complete sentence frames	<ul> <li>Uses some recognizable letters often unrelated to sound</li> </ul>	
E.	Attempts to write one or two captions	<ul><li>Copies several letters</li><li>Independently writes some</li></ul>	
F.	Use letter-like approximation	identifiable letters (Note: letter usually comes from own name; child may not write left to right)	

### **THE CHILD AT AGE THREE – LITERACY DEVELOPMENT**

### I. ORAL LANGUAGE

**STANDARD:** The child will communicate their experiences, ideas, and feelings by speaking.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENTS/NOTES
То		The child:	
А. В. С.	Respond nonverbally by gesturing and by imitating sounds and actions Speak clearly including use of appropriate tone and inflection Use sentences with five or more words to describe ideas, feelings, and actions	<ul> <li>Gestures by nodding, pointing, choosing</li> <li>Makes appropriate oral responses to questions</li> <li>Joins in with classmates on poems and songs</li> </ul>	
D.	Speaks to initiate a conversation or enter into a play situation and speak for a variety of other purposes	<ul> <li>Speaks dominant language clearly</li> <li>Uses indoor voice</li> <li>Uses sentences with two or more separate ideas connected by words such as 'and'.</li> </ul>	
E.	Demonstrates understanding of basic conversational vocabulary	<ul> <li>Takes different roles in dramatic play and puppetry</li> </ul>	
F.	Demonstrates understanding of message in conversation	<ul><li>Follows directions</li><li>Role plays appropriately</li></ul>	
G.	Comprehends simple repeated sentences	<ul> <li>Mimics nursery rhymes and</li> </ul>	
Н.	Demonstrates comprehension through facial expressions, body language, and gestures	<ul> <li>simple classic children's literature</li> <li>Acts out one of the related ideas in a story</li> <li>Asks questions of teacher and</li> </ul>	
l.	Recognize and name a variety of pictured locations	peers	
J.	Names some colors	<ul> <li>Takes at least two turns talking to adults or peers: responses are brief but related to speaker's prior comments</li> <li>Describes places he/she has been</li> <li>Uses color words in conversation</li> </ul>	

### **II. VISUAL PERCEPTION**

**STANDARD:** The child will develop visual perception.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENTS/NOTES
To:		The child:	
A.	Identify some colors and shapes	Names the color or shape of an	
В.	Recognize some letters in	object in a picture book	
	his/her name	<ul> <li>Names shapes in their</li> </ul>	
C.	Identify the concepts of top,	environment	
	middle, bottom, front and back	<ul> <li>Names letters in his/her name</li> </ul>	
D.	Recognizes some labels and	and identifies those letters in	
	symbols	other words	
E.	Reproduces visual sequential	<ul> <li>Plays directional games</li> </ul>	
	patterns	<ul> <li>Puts materials in a box identified</li> </ul>	
F.	Recognizes visual differences	as his/her own	
G.	Interprets pictures	<ul> <li>Goes to centers identified by</li> </ul>	
		labels	
		<ul> <li>Reproduces patterns using</li> </ul>	
		pattern cards	
		<ul> <li>Describes blocks as bigger,</li> </ul>	
		smaller, red, etc.	
		<ul> <li>Tells stories from pictures</li> </ul>	

### **III. PHONEMIC AWARENESS**

**STANDARD:** The child will develop phonemic awareness.

STUDENT OBJECTIVE		ENABLING OUTCOMES		ASSESSMENTS/NOTES
To:	Respond to presence or absence	The chi	ld: Identifies common sounds in	
	and/or location of sounds and other sound characteristics	•	rhyming words Identifies the rhyming parts of	
	Name gross differences in sound characteristics (loud/soft, fast/slow)	•	words in nursery rhymes and songs Identifies in common objects	
	Name a variety of environmental sounds and match these sounds with their associated pictures	•	whether the sound if loud or soft, hard or soft Identifies harsh sounds Matches animals and objects to	
	Use imitative and creative expression in the recall of poems and role play	•	the sounds they make Completes lines with rhyming words	

### IV. PROBLEM SOLVING AND CRITICAL THINKING

**STANDARD:** The child will master language and expressive skills necessary for problem solving and critical thinking.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENTS/NOTES
To:		The child:	
A.	Describe and compare experiences and events	<ul> <li>Describes family vacations and compares these with story</li> </ul>	
В.	Describe unique characteristics of self and own culture	<ul><li>characters and classmates</li><li>Uses dramatic play to describe</li></ul>	
C.	Compare and contrast people and objects	and compare personal experiences	
D.	Use simple phrases and sentences to express personal observations	<ul><li>Describes family customs</li><li>Contributes to classroom journal and field trips</li></ul>	
E.	Use simple phrases and sentences to think through and solve problems	<ul> <li>During story time, tells what he/she would do if faced with the conflict or events of the story</li> </ul>	

### V. READING STRATEGIES

**STANDARD:** The child will exhibit interest in reading.

STUDEN	STUDENT OBJECTIVE		NG OUTCOMES	ASSESSMENTS/NOTES
To:		The chi	ld:	
A.	Follow along on picture walks	•	Participates during shared	
B.	Use illustrations and other		readings of predictable text	
	graphic clues to attach meaning	•	Supplies next word as teacher	
	to printed material		pauses while reading familiar	
C.	Retell information from a story		texts	
D.	Show interest in reading-related	•	Makes one related comment to	
	activities		the story	
E.	Attend to a story	•	Retells one or two main events in	
F.	Demonstrate book awareness		a story	
G.	Recognize matching sounds and	•	Responds to stories with	
	some printed letters		appropriate emotion	
H.	Compare and contrast some	•	Chooses books or reading	
	elements of illustrations in		activities during learning center	
	stories		time	
		•	Looks at pictures and pretend	
			reads (tells story from pictures)	

<ul><li>Listens to stories</li><li>Holds book upright and turns</li></ul>
pages starting at the front of the book
Points to printed words as he/she
pretend reads
<ul> <li>Points out names that begin with the same letters</li> </ul>
Identifies rhyming words in
nursery rhymes with support

### VI. WRITTEN LANGUAGE

**STANDARD:** The child will use different forms of writing such as drawing, letter-like forms, invented spelling and conventional forms.

STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
To:	The child:	
A. Use symbols or drawings to express thoughts, feelings, and ideas     B. Illustrates characters, objects, and actions to convey meaning	<ul> <li>Uses crayons, markers, pencils, etc to make scribbles and differentiates drawing scribbles from writing scribbles</li> <li>Uses pretend writing and some letter-like shapes to convey meaning</li> <li>Draws pictures to tell stories</li> </ul>	



#### ★ THE CHILD AGES FOUR AND THREE - MATHEMATICAL THINKING

From ages 3 through 6, the young child begins to solve mathematical problems by interacting with hands-on experiences. Self-motivated the child finds patterns in butterfly wings; shapes on the playground; and relates counting skills to solve everyday problems. Through trial and error he/she grasps how scales measure weight and rulers measure height. The child's natural curiosity is cultivated in an environment that encourages countless opportunities for the child to explore, investigate, manipulate, observe, discover, reorganize, reinvent, and represent his/her learning.

"Effective mathematics programs include intentionally organized learning experiences that build the child's understanding over time. Depth is best achieved when content and process are considered with equal weight. The following standards for pre-kindergarten through Grade 2 are endorsed by the National Council of Teachers of Mathematics." (State of Connecticut State Board of Education 2007 <u>Early Childhood: A Guide to Early Childhood Development</u> pg.85)

#### **PROCESS STANDARDS**

- Problem Solving
- Reasoning
- Communicating
- Connecting
- Representing

#### **CONTENT STANDARDS**

- Number Sense, Concepts, and Operations
- Geometry, Spatial Sense, and Measurement
- Patterns, Functions, and Algebra
- Data Analysis and Probability

The <u>Early Childhood: A Guide to Early Childhood Development</u> advises that opportunities in each of the content areas are not enough. It is important that the early learner understand that math is a language. The child needs many opportunities to engage in conversation, to question, and most importantly to explore! To do this successfully teachers must know which concepts and relationships the child is ready and able to explore (Bredekamp & Rosengrant, 1995). Following closely with the Connecticut standards for mathematics for preschool and the Connecticut Mathematics Curriculum Framework, Grades PreK - 12 our Mathematics Curriculum is consistent with these concepts.

The Mathematics Curriculum for the three and four year olds encompasses the following content areas:

- NUMBER SENSE, CONCEPTS, AND OPERATIONS
- GEOMETRY, SPATIAL SENSE, AND MEASUREMENT
- DATA ANALYSIS AND PROBABILITY.

We are following the suggestions of The National Association for the Education of Young Children (NAEYC) and the National Council of Teachers of Mathematics (NCTM). In order to insure that the early learner comes to understand that math is a language, we have divided the content standards into two areas: PROCESS STANDARDS AND CONTENT STANDARDS to be integrated into your daily mathematics lessons.

### **THE CHILD AT AGE FOUR - MATHEMATICAL DEVELOPMENT**

I. PROCESS STANDARD PROBLEM SOVLING

**STANDARD:** The child will get involved in mathematical task swhere he/she can develop dispositions for persisting, testing, focusing, and risk taking in the pursuit of a mathematical solution to a problem.

STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A. To solve mathematical problems that arise in daily life and draw logical conclusions.	<ol> <li>The child will recognize math concepts and use mathematical skills to comprehend children's literature.</li> <li>The child will investigate and explore a problem without interruption.         <ul> <li>The child will explore objects that sink or float.</li> <li>The child will use different types of scales to weigh a variety of items.</li> <li>The child will use a variety of blocks to build towers of various heights.</li> <li>The child may estimate to solve a</li> </ul> </li> </ol>	

		mathematical problem.
В.	To use questioning strategies that are openended and imaginative in thinking.	The child recognizes math concepts in children's literature and uses open-ended questions, imagination, mathematical skills to arrive at a creative solution.
C.	To justify his/her answers, solutions, and processes.	The child will work with a cooperative group to discuss his/her process to solve a problem and justify his/her answer.
	RESOURCES: CHILDREN'S LITERATURE:	Appleby, Ellen, Nozaki. 1985. <i>Three Billy Goats Gruff.</i> New York: Scholastic Books.
		Carle, Eric. 1984. <i>The Hungry Caterpillar</i> . New York: Philomel Books.
		Carle, Eric. 1984. <i>The Very Busy Spider</i> . New York: Philomel Books.
		Martin, Bill, Nozaki. 1983. <i>Brown Bear, Brown Bear,</i> What Do You See? New York: Henry Holt & Company.

### II. PROCESS STANDARD REASONING

**STANDARD:** The child will explain and analyze possibilities for problem solving using reasoning skills.

ST	UDENT OBJECTIVE	EN	ABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To use patterns and classifications to analyze mathematical situations.	1. 2. 3.	The child will recognize patterns in a mathematical or life problem.  The child will guess what comes next.  The child will think about a hypothesis and talk about the process as well as the information.	Harris, Trudy. Pattern Fish. Pluckrose, Henry. Math Counts: Patterns
В.	To use models, known fact, properties, and relationships to justify his/her hypothesis/thinking.	1.	The child will use data from pictures, diagrams, and graphs from child's books to justify his/her hypothesis.	Rotner. R. Close, Closer, Closest.
C.	To justify his/her answers, solutions, and processes.	1.	The child will work with a cooperative group to discuss his/her process to solve a problem and justify his/her answer.	Stockdale. S. Nature's Paintbrush: Patterns and Colors Around You.  Whitford, Paul &Ann. 1991. Eight hands Round: A Patchwork Alphabet. New York: Harper Collins

			Publishers.
J.	To reflect upon his/her hypothesis.	<ol> <li>The child discusses and explores with peers his/her hypothesis.</li> </ol>	

### III. PROCESS STANDARD COMMUNICATING

**STANDARD:** The child will develop communication skills.

**STANDARD:** The child will explain, justify, and answer questions for his/her hypothesis; organizing, connecting and showing his/her thought processes.

ST	UDENT OBJECTIVE	EN	ABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To use the language of mathematics to represent, discuss, listen, write, and read mathematics as a vital part of learning.	1. 2. 3.	The child will use appropriate vocabulary to express and solve his hypothesis. The child will explain why or how the hypothesis will work. The child will relate his hypothesis and experiences to mathematical terms and symbols.	Martin, Bill. Here Are my Hands. New York: Henry Holt & Company.  Slobodkina, Ephyr. 1940. Caps for Sale. New York: Harper & Row.  Stinson, Kathy. 1982. Red is the Best! Toronto: Annick Press. Ltd.
В.	To relate mathematical ideas to pictures graphs, and diagrams.	1. 2. 3.	The child will reflect upon his/her problem solving and use data to understand new mathematical knowledge.  The child will use data from pictures, diagrams, and graphs to communicate his/her hypothesis.  The child will relate activities to mathematical terms and symbols.	

### IV. PROCESS STANDARD CONNECTING

**STANDARD:** The child will connect his/her real life experiences with formal mathematical concepts.

S.	STUDENT OBJECTIVE		ABLING OUTCOMES	ASSESSMENTS/NOTES
Α.	To find relationship	1.	The child will reflect upon his/her own data to	
	between his/her own		understand the relationship between the	Branley, Franklyn &
	classroom activities and		problem and his/her hypothesis.	Vaughan, Eleanor. 1956
	mathematical reasoning.	2.	The child will discuss connections to science.	Mickey's Magnet. New

3.	The child will discuss the connections to	York: Scholastic Book
	literature.	Services.
4.	The child will discuss the connection to his/her	
	cultural background.	Haskins, Jim. 1989.
		Count Your Way Through
		Mexico. Minneapolis:
		Carolrhoda Books, Inc.

### V. PROCESS STANDARD REPRESENTING

**STANDARD:** The child will represent his/her hypothesis or thinking by using clay, blocks, drawings, language, diagrams, charts, and eventually number symbols. By providing this opportunity the child has a tool for making relationships in mathematics.

ST	UDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To visually or physically represent math ideas.	<ol> <li>The child will represent math ideas with blocks, manipulatives, in drawings and in many media forms.</li> <li>Additional Resources:         Peek, Merle. 1981. Roll Over! A Counting Book.         New York: Clarion Books.     </li> <li>Peters, Lisa Westberg. 1988. The Sun, The Wind and the Rain. New York: Henry Holt &amp; Co.</li> </ol>	Kite, Patricia. 1995. Gardening Wizardry for Kids. New York: Barron's Educational Services.
В.	To relate mathematical ideas to pictures, graphs, and diagrams.	<ol> <li>The child will relate activities to mathematical terms and symbols using pictures, graphs, or diagrams.</li> <li>The child will make journals representing his/her mathematical findings.</li> <li>The child will make simple numerical summaries such as tables and bar graphs, comparing parts of data.</li> </ol>	

# I. CONTENT STANDARD NUMBER SENSE, CONCEPTS AND OPERATIONS

**STANDARD:** The child will actively demonstrate an understanding of whole numbers with a myriad of activities for counting, one-to-one correspondence, and number relationships.

**STANDARD:** The child will actively demonstrate an understanding of beginning operations of joining and separating sets.

STU	STUDENT OBJECTIVE		ABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To match, sort, put into a series, and regroup objects according to one or two attributes.	1. 2. 3. 4. 5. 6. 7.	The child will construct two sets of objects, each containing the same number of objects.  The child identifies the differences between objects and can group them by one attribute such as color and size.  The child will converse with a partner the similarities and differences among objects and manipulatives, talking about color, shape, and size.  The child will recognize the similarities between two objects and match them consistently.  The child will sort objects by color by placing all objects of the same color in one basket.  The child will play with a variety of manipulatives and converse back and forth the similarities of different pieces.  The child will note similarities and differences of puzzle pieces while working in a small group.  The child will group and regroup a given set in the context of daily activities and play.  The child will work with a partner to string a necklace matching one-to-one small colored cubes or beads.  The child will play matching games like Memory or Shape Bingo.  The child will sort objects according to color,	ASSESSMENTS/NOTES
			shape, or size.	
B.	To identify the difference between several objects and group them by more than one attribute.	1. 2.	The child will converse with a partner about similarities and differences among objects and manipulatives, talking about color, shape, size, textures, and more subtle differences.  The child will sort blocks or pattern blocks by two attributes such as small and large stacking them in two piles.  The child will create an AB pattern.	

		4.	The child will play people-sorting games	
			such as all boys with sneakers, or all girls	
			with brown hair, or all children with belts.	
C.	To show an interest and	1.	The child will count to 10 and beyond in the	
	curiosity in counting and		context of daily activities.	
	grouping objects and	2.	The child will count with the teacher the	
	numbers.		number of students present.	
		3.	The child will count with the teacher the	
			number of boys and girls in class.	
		4.	The child will count the number of days	
			using the calendar.	
		5.	The child will converse with the teacher	
			about quantities of objects, children, chairs,	
			crackers, etc., counting up to 10 and	
		_	beyond.	
		6.	The child will touch objects and say the number names when counting in the	
			context of daily activities and play.	
		7.	The child will converse back and forth while	
		′ ′	he/she counts the number of tables and	
			chairs in the classroom.	
		8.	The child will count the number of students	
			who need milk/juice for the daily snack.	
		9.	The child will count the number of steps in a	
			simple dance.	
		10.	The child will sing or chant finger plays and	
			songs with counting.	
		11.	The child will listen to books about counting.	
D.	To count objects or people	1.	The child will demonstrate one-to-one	
	with an awareness of		correspondence when counting objects.	
	quantity and one-to-one	2.	The child will determine "how many" in sets	
	correspondence in larger		of 5 or fewer.	
	quantities.	3.	The child will determine "how many" in sets	
			of 10 or fewer.	
		4.	The child will enjoy counting up to 20 and	
		5.	beyond. The child will enjoy counting up to 50	
		5. 6.	The child will enjoy counting up to 50. The child will enjoy counting up to 100.	
		7.	The child will follow oral directions in	
			movement games that include clapping,	
			stomping, and counting.	
		8.	The child will recognize the connection	
			between numeral and the quantity.	
		9.	The child will enjoy making number books	
			showing the numeral and the quantity.	
_	To show more assurasy	1	The child will play with cand water or other	
E.	To show more accuracy when comparing quantities	1.	The child will play with sand, water or other substances in tubs to measure and pour	
	naming or ordering two or		substances and note which container holds	
	three whole numbers.		more, less or equal.	
	ance whole numbers.	<u> </u>	more, less or equal.	

	-
	2. The child will identify the numbers on the
	calendar and note they go in order.
	3. The child will identify the numbers on a
	number line.
F. To compare quantities using	1. The child will play at the sand or water table
vocabulary of equal, more,	and make comparisons of more, less, or
or less and name and order	equal to when measuring different
whole numbers one through	quantities.
20.	2. The child will recognize numeric order when
	relating numbers to the calendar or number line.
	3. The child will play with number puzzles and
	matching games ordering numbers one
	through twenty.
	4. The child will identify and name numerals 0
	through 9.
	5. The child will compare and order numbers 1
	through 10.
	6. The child will compare and order numbers
	10 through 20.
	7. The child will recognize numbers 1 through
	10 in his/her environment.
	8. The child will connect numerals in a given
	quantity.
	9. The child will use a variety of manipulatives
	and objects to make different quantities
	from 1 through 10.
	10. The child will begin to write numerals to
	match a given quantity.
	11. The child will count forward using objects
	such as cards, number cubes, or dominoes
	that have similar dot patterns.
	12. The child will join sets of objects to make one large set in the context of daily routines
	and play.
	13. The child will distribute a set of objects into
	two or more sets.
	14. The child will create number books ordering
	numbers one through five with stickers or
	collage materials.
RESOURCES: CHILDREN'S	Anno, Mitsumasa, 1977. Anno's Counting Book.
LITERATURE	New York: Crowell Junior.
	Anno, Mitsumasa, 1982. Anno's Counting House.
	New York: Philomel.
	Baker, K. Quack and Count.
	Bang, Molly, 1989. <i>Ten, Nine, Eight</i> . Orlando FI:
	Harcourt Brace Jovanovich.

Carle, Eric, 1972. Rooster Off To See The World. Natick, MA: Picture Book Studio. Carter, David, 1988. How Many Bugs in a Box. New York: Simon & Schuster. Ehlert, Lois, 1990. Fish Eyes. Orlando Fl; Crowell Junior, Harcourt Brace Jovanovich. McMillian, Bruce, 1986. Counting Wild Flowers. New York: Lothrop Lee and Shepard. Moss, L. 1995. Zin! Zin! Zin! The Violin. New York: Simon & Schuster Books for Young Readers. Thornhill, Jan, 1989 1-2-3 A Nature Counting Book. New York: Simon & Schuster. New York: McClanahan Books. Pragoff, Fiona, 1986 How Many" From 0-20. New York: Doubleday Yolen, Jane, 1976. An Invitation to the Butterfly Ball. New York: Philomel.

# II. CONTENT STANDARD GEOMETRY, SPATIAL SENSE, AND MEASUREMENT

**STANDARD:** The child will understand geometry and spatial awareness as part of the classroom environment, materials and activities engage the child in daily routines, work and play.

**STANDARD:** The child will explore the world around him/her, thinking about and working with geometric/spatial relationships and manipulating two-dimensional and three dimensional shapes.

ST	UDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To distinguish and name shapes and directions.	<ol> <li>The child will identify geometric shapes-circle, triangle, square- using puzzles and manipulatives.</li> <li>The child will identify the shape of common objects such as the table, a label, a bulletin</li> </ol>	
		board, etc. throughout the classroom environment.  3. The child will converse that the shape of a circle is round, that a triangle has three sides, and that a square has four equal sides.	
		4. The child will demonstrate and begin to use language of relative position of objects in environment and play situations: up, down, over, under, top, bottom, inside, outside, in front, and behind.	

		11.	The child will construct with blocks and other materials while listening to oral directions. e.g., Place three blocks on top of each other.  The child will follow oral directions playing "Simon Says". e.g., "Simon Says go under the chair." "Simon Says go behind the chair."  The child will play Shape Bingo or I Spy with shapes in the environment.  The child will name shapes in clothing, books, artwork, signs, and nature.  The child will note the similarities and differences in common shapes.  The child will make a book of shapes.  The child will make a book showing a circle on a square; under a square; next to a square; and behind a square.  The child will trace and color a circle, square, and triangle.	
В.	To show an interest in comparing plane shapes and solids.	1. 2. 3.	The child will enjoy many toys for construction, exploration, and manipulation noting their shape and size:  Large and small blocks Lego building blocks Connectors and gears.  The child will identify solid figures as having faces and edges.  The child will name solid figures: Cube Sphere Rectangular prism Cylinder Cone.  The child names plane shapes: Circle Diamond Hearts Ovals Rectangle	
		5.	Square Star Triangle The child begins to use plane shapes separately to create pictures: House Car Trees Person Clown The child will measure objects one to another or use a measurement tool in play and in meaningful everyday activities.	

	7.	The child will demonstrate and begin to use	
		language of the relative position of objects in	
		the environment and play situations:	
		<pre>Up</pre>	
		Down	
		Over	
		Under	
		Пор	
		Bottom	
		Inside	
		Outside	
		In front	
		behind	
	8.	The child will use descriptive words to	
		compare objects:	
		Long or short	
		Light or heavy	
		Big or small	
		<b>G</b>	
C. To develop and a	pply units, 1.	The child will use descriptive words to	
systems, formula		compare objects:	
appropriate tools		Long or short	
estimate and mea		Light or heavy	
		Big or small.	
	2.	The child records results of measuring on	
		visually attractive graphs:	
		Heights of plants	
		Heights of children in his/her group	
		Weights of pumpkins or vegetables	
		etc.	
	3.	The child will use a variety of tools to explore	
		measurement: scales, rulers, yardsticks, and	
		clocks.	
	4.	The child will converse about the different	
		times of day, upcoming events, and the	
		sequence of events.	
		The child will identify day, night, and	
		week.	
		The child will use language units for	
		yesterday, today, and tomorrow.	
		The child will draw the activities of	
		the day to be posted on the bulletin	
		board.	
	5.	The child will understand that the clock tells	
	<b>)</b> .	the time of the day.	
	6.	The child will sequence or order events in the	
	0.	context of daily activities and play using the	
		following words: first, next, last, before, and	
		after.	
	7.	The child will begin to order objects according	
	'.		
		to size using descriptive words: Large, small, larger, and smaller.	
1		iaigei, aiiu siiiaiiel.	i l

The child will begin to order objects according to length using descriptive words: short, shorter, shortest, long, longer, and longest. 9. The child will begin to order objects according to weight using descriptive words: light, heavy, lightest, heaviest, lighter, and heavier. 10. The child will begin to order objects according to height using descriptive words: high, low, higher, lower, highest, lowest, tall, taller, and tallest. 11. The child will create a time line with teacher assistance. 12. The child will play at the sand table or water table to measure capacity using descriptive words: full, empty, holds more, or holds less. D. To use the correct The child will talk about the different times of vocabulary to describe the the day, upcoming activities, and the sequence times of the day with some of events. accuracy in sequencing 2. The child will identify day, night, and week. events. 3. The child will use language units for yesterday, today, and tomorrow. 4. The child will draw the activities of the day to be posted on the bulletin board. 5. The child will assist the teacher by announcing "what's next" in the daily routine. 6. The child will set the timer for upcoming transitions to other activities. 7. The child will know the features of the clock: 8. When the big hand is on the ten it will be time to clean up. 9. The big hand tells the hour 10. The little hand tells the minutes. 11. The child refers to the clock to tell the time of 12. The child can sequence events in games and puzzles that include at least three steps: 13. Hatching of an egg 14. Life cycle of a butterfly 15. The growth of a flower. 16. The child will converse about the different times of day, upcoming events, and the sequence of events. 17. The child will draw the activities of the day to be posted on the bulletin board. 18. The child will understand that the clock tells the time of the day.

RESOURCES: CHILDREN'S	Amato, William. 2002. Math on the Playground.
	, , ,
LITERATURE	New York: Scholastic Library Publishing.
	Arenson, Roberta. 1998. One, Two, Skip a Few!
	First Number Rhymes. Barefoot Books, Inc.
	Baranski, J. Round as a Pancake.
	Carle, Eric. 1990. The Tiny Seed. Saxonville, MA:
	· · · · · · · · · · · · · · · · · · ·
	Picture Book Studio.
	Carle, Eric. 1996. The Grouchy Ladybug. New York:
	HarperCollins.
	Ehlert, Lois. <i>Color Zoo</i> .
	Lionni, Leo. 1960. Inch by Inch. New York:
	Scholastic
	Scholastic
	Anna Milanga Adolo Allin A Den Mann Varla
	Anno, Mitsumasa. 1990. All in A Day. New York:
	Putnam
	Schulevitz, Uri. 1967. <i>One Monday Morning.</i> New
	York: Charles Scribner's Sons.
	Stevens, J. & Crummel, S.S. Cook-A-Doodle-Doo!
	, , , , , , , , , , , , , , , , , , , ,
	Wellington, M. Cookie Baker.
	vveilington, ivi. cookie buker.

# III. CONTENT STANDARD PATTERNS, FUNCTIONS, AND ALGEBRA

**STANDARD:** The child will explore and create patterns with a variety of materials. Through activities of sorting, classifying, and ordering various objects by color, size, and shape, the child will create simple numeric patterns and translates from one representation to another.

STU	STUDENT OBJECTIVE		ABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To sort, order and classify objects by one attribute.	<ol> <li>2.</li> <li>3.</li> </ol>	The child shows increasing abilities to match, sort, put in a series, and regroup objects according to one or two attributes such as shape and size.  The child will sort and classify manipulatives according to color and size.  The child will sort and classify manipulatives according to color and size.	
В.	To identify, copy, extend and create simple patterns or sequences of sounds,	1. 2.	The child will notice and copy simple repeating patterns in a song. The child will notice and duplicate a simple	

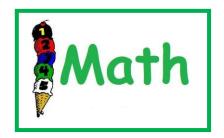
shapes and motions in the context of daily activities and play.	repeating pattern in a dance.  3. The child will draw a simple repeating pattern.  4. The child will make simple patterns with a variety of materials.
C. To use play, physical materials or drawings to model simple patterns.	<ol> <li>The child sorts blocks, crayons, cars, etc by color and organizes them in a simple AB pattern.</li> <li>The child sorts various materials by size and creates a simple AB pattern.</li> <li>The child sorts beads by color and size and creates a necklace with an AB pattern.</li> </ol>
RESOURCES: CHILDREN'S LITERATURE	Berger, Barbara. 1984. <i>Grandfather Twilight</i> . New York: Philomel Books.  Carlstrom, Nancy White. 1986. <i>Jesse Bear, Jesse Bear, What Will You Wear?</i> New York: Macmillan Publishing Company.  Degen, Bruce. 1983. <i>Jamberry</i> . New York: Harper & Row.  Martin, Bill, Jr. 1983. <i>Brown Bear, Brown Bear, What Do You See?</i> New York: Henry Holt and Co.  Pluckrose, Henry. 1995. <i>Math Counts: Patterns</i> . New York: Scholastic.

### IV. CONTENT STANDARD DATA ANALYSIS AND PROBABILITY

**STANDARD:** The child will collect, describe, and analyze, and record data is explored through hands-on activities. The early learner observes events, explores materials, collects, organizes, and records information through drawings, maps, charts, and graphs.

STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To pose questions and gather data about him/herself and his/her surroundings.	<ol> <li>The child asks questions of peers to collect data making a tally sheet. (How many girls are here today? How many boys are here today? etc.)</li> <li>The child graphs birthdays on the birthday chart.</li> </ol>	
B.	To share questions, data, and predictions with peers and listen to the predictions of others with critical respect.	<ol> <li>The child participates in group brainstorming.</li> <li>The child works in cooperative groups to make predictions, gather, and communicate information.</li> </ol>	

C.	To sort and classify objects according to their attributes and organize data about the objects.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> </ol>	The child sorts blocks, crayons, cars, etc by color and organizes data about the objects to create a graph.  The child places objects or information on a floor graph according to one attribute to determine whether or not two shapes or blocks are the same size or color.  The child will demonstrate an increasing interest and awareness of numbers and counting as a means for solving problems and determining quantity.  The child graphs objects on a floor graphing according to two attributes color and size.	
D.	To represent data using concrete objects, pictures, and graphs.	1.	The child uses pictographs, bar graphs, and tally marks to represent data.	
E.	To discuss events related to his/her experiences as likely or unlikely.	1.	The child will predict through graphing activities with the daily calendar and daily activities.	
	SOURCES: CHILDREN'S ERATURE	And Cre Gre Jen Like	no, Mitsumasa & Akihiro, Nozaki. 1985. no's Hat Tricks. New York: Philomel Books. ews, Donald. 1986. Ten Black Dots. New York: eenwillow kins, S. & Page, R. What Do You Do With a Tail e This? ishi, S. Who's Hiding?	



### THE CHILD AT AGE THREE - MATHEMATICAL DEVELOPMENT

### I. PROCESS STANDARD PROBLEM SOVLING

**STANDARD:** The child will get involved in a mathematical task where he/she can develop dispositions for persisting, testing, focusing, and risk taking in the pursuit of a mathematical solution to a problem.

STU	JDENT OBJECTIVE	EN	ABLING OUTCOMES	ASSESSMENTS/NOTES
Α.	To solve mathematical problems that occur in daily life and draw logical conclusions.	1.	The child will recognize math concepts and use mathematical skills to comprehend children's literature.  The child will investigate and explore a problem without interruption. e.g.,  a. The child will explore objects that sink or float.  b. The child will use different types of scales to weigh a variety of items.  c. The child will use a variety of blocks to build towers of various heights.  d. The child may estimate to solve a mathematical problem.	
A.	To use questioning strategies that are openended and imaginative in thinking.	1.	The child recognizes math concepts in children's literature and uses open-ended questions, imagination, mathematical skills to arrive at a creative solution.	
В.	To justify his/her answers, solutions, and processes.	1.	The child will work with a cooperative group to discuss his/her process to solve a problem and justify his/her answer.	
	RESOURCES: CHILDREN'S LITERATURE:		Inley, Franklyn. 1986. Air is All Around Us. New Ik: Thomas Crowell.  Ile, Eric. 1984. The Hungry Caterpillar. New Ik: Philomel Books.  Irtin, Bill, Nozaki. 1983. Brown Bear, Brown Bar, What Do You See? New York: Henry Holt & Mannay.	

### II. PROCESS STANDARD REASONING

**STANDARD:** The child will explain and analyze possibilities for problem solving using reasoning skills.

STU	UDENT OBJECTIVE	ENABLING OUTCOMES		ASSESSMENTS/NOTES
A.	To use patterns and classifications to analyze mathematical situations.	1. 2. 3.	The child will recognize patterns in a mathematical or life problem. The child will guess what comes next. The child will think about a hypothesis and talk about the process as well as the information.	Harris, Trudy. Pattern Fish.  Pluckrose, Henry. Math Counts: Patterns
В.	To use models, known fact, properties, and relationships to justify his/her hypothesis/thinking.	1.	The child use data from pictures, diagrams, and graphs from child's books to justify his/her hypothesis.	
C.	To justify his/her answers, solutions, and processes.	1.	The child will work with a cooperative group to discuss his/her process to solve a problem and justify his/her answer.	Stockdale, S. Nature's Paintbrush: The Patterns and Colors Around Us.
D.	To reflect upon his/her hypothesis.	1.	The child discusses and explores with peers his/her hypothesis.	

### III. PROCESS STANDARD COMMUNICATING

**STANDARD:** The child will communicate skills to explain, justify, and answer questions for his/her hypothesis organizing, connecting and showing his/her thought processes.

STUDENT OBJECTIVE		ENABLING OUTCOMES		ASSESSMENTS/NOTES
A.	To use the language of mathematics to represent, discuss, listen, write, and read mathematics as a vital part of learning.	1. 2. 3.	The child will use appropriate vocabulary to express and solve his hypothesis. The child will explain why or how the hypothesis will work. The child will relate his hypothesis and experiences to mathematical terms and symbols.	Martin, Bill. Here Are my Hands. New York: Henry Holt & Company.  Slobodkina, Ephyr. 1940. Caps for Sale. New York: Harper & Row.  Stinson, Kathy. 1982. Red is the Best! Toronto:
				Annick Press. Ltd.
В.	To relate mathematical ideas to pictures graphs, and diagrams.	1.	The child will reflect upon his/her problem solving and use data to understand new mathematical knowledge.  The child will use data from pictures, diagrams, and graphs to communicate his/her hypothesis.	

The child will relate activities to mathematical terms and symbols.

### IV. PROCESS STANDARD CONNECTING

**STANDARD:** The child will connect his/her real life experiences with formal mathematical concepts.

STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A. To find relationship between his/her own classroom activities and mathematical reasoning.	<ol> <li>The child will reflect upon his/her own data to understand the relationship between the problem and his/her hypothesis.</li> <li>The child will discuss connections to science.</li> <li>The child will discuss the connections to literature.</li> <li>The child will discuss the connection to his/her cultural background.</li> </ol>	Branley, Franklyn & Vaughan, Eleanor. 1956 Mickey's Magnet. New York: Scholastic Book Services.  Haskins, Jim. 1989. Count Your Way Through Mexico. Minneapolis: Carolrhoda Books, Inc.
RESOURCES: CHILDREN'S	Anno, Mitsumasa, 1977. Anno's Counting Book.	
LITERATURE	New York: Crowell Junior.	
	Anno, Mitsumasa, 1982. <i>Anno's Counting House.</i> New York: Philomel.	
	Baker, K. <i>Quack and Count.</i> Bang, Molly, 1989. <i>Ten, Nine, Eight.</i> Orlando FI: Harcourt Brace Jovanovich.	
	Carle, Eric, 1972. Rooster Off To See The World. Natick, MA: Picture Book Studio.	
	Carter, David, 1988. <i>How Many Bugs in a Box.</i> New York: Simon & Schuster.	
	Ehlert, Lois, 1990. <i>Fish Eyes</i> . Orlando FI; Crowell Junior. Harcourt Brace Jovanovich.	
	Thornhill, Jan, 1989 1-2-3 A Nature Counting Book. New York: Simon & Schuster.	

### V. PROCESS STANDARD REPRESENTING

**STANDARD:** The child will represent his/her hypothesis or thinking by using clay, blocks, drawing, language, diagrams, charts, and eventually number symbols.

**STANDARD:** The child will make authentic relationships using mathematics.

STUDENT OBJECTIVE		ENABLING OUTCOMES		ASSESSMENTS/NOTES
Α.	To visually or physically represent math ideas.	1.	The child will represent math ideas with blocks, manipulatives, in drawings and in many media forms.	Kite, Patricia. 1995. Gardening Wizardry for Kids. New York: Barron's Educational Services.  Peek, Merle. 1981. Roll Over! A Counting Book. New York: Clarion Books.  Peters, Lisa Westberg. 1988. The Sun, The Wind and the Rain. New York: Henry Holt & Co.
B.	To relate mathematical ideas to pictures graphs, and diagrams.	1. 2. 3.	The child will relate activities to mathematical terms and symbols using pictures, graphs, or diagrams.  The child will make journals representing his/her mathematical findings.  The child will make simple numerical summaries such as tables and bar graphs, comparing parts of data.	

# I. CONTENT STANDARD NUMBER SENSE, CONCEPTS AND OPERATIONS

**STANDARD:** The child will actively demonstrate an understanding of whole numbers with a myriad of activities for counting, one-to-one correspondence, and number relationships.

**STANDARD:** The child will actively demonstrate an understanding of beginning operations of joining and separating sets.

STUDENT OBJECTIVE		ENABLING OUTCOMES		ASSESSMENTS/NOTES
A.	To match, sort, put into a series, and regroup objects according to one or two attributes.	1. 2.	The child will construct two sets of objects, each containing the same number of objects. The child will recognize the similarities between two objects and match them consistently.  The child will match and sort blocks according	

	to size.  4. The child will play with a variety of manipulatives and converse back and forth about the similarities of different pieces.  5. The child will note the similarities and differences of puzzle pieces while working in a small group.  6. The child will group and regroup a given set in the context of daily activities and play.  7. The child will work with a partner to string a
	necklace matching one-to-one small colored cubes or beads.  8. The child will play matching games like Memory or Shape Bingo.  9. The child will sort buttons by color and size.
B. To show an interest and curiosity in counting and grouping objects and numbers.	<ol> <li>The child will count to 10 and beyond in the context of daily activities.</li> <li>The child will count with the teacher the number of students present.</li> <li>The child will count with the teacher the number of boys and girls in the class.</li> <li>The child will touch objects and say the number names when counting in the context of daily activities and play.</li> <li>The child will converse back and forth while he/she plays the numbers of chairs and tables in the classroom.</li> <li>The child will converse back and forth the number of napkins needed for today's snack or lunch.</li> <li>The child will count the number of steps in a simple dance.</li> <li>The child will demonstrate one-to-one correspondence when counting objects.</li> <li>The child will determine "how many" in sets of 5 or fewer.</li> <li>The child will sing or chant finger plays and songs with counting.</li> <li>The child will count the number of blocks in a simple block tower.</li> <li>The child will count the number of crayons in a crayon box.</li> </ol>

C. To show some awareness or accuracy when comparing quantities and or/little accuracy in naming or ordering whole numbers.	<ol> <li>The child will play with sand, water or other substances in tubs to measure and pour substances and note which container holds more ,less, or equal.</li> <li>The child will note the numbers on a calendar go in order.</li> <li>The child will compare sets of equal, more, and fewer and use the language of comparison.</li> <li>The child will hang numbers 1 – 5 on a line in order.</li> <li>The child will place numbers 1 – 10 in order on the table or floor.</li> <li>The child will note when building with blocks how many more blocks are needed to complete a tower or bridge.</li> <li>The child will recognize numbers 1 – 10 in his/her environment or in literature.</li> <li>The child will connect numerals to a given quantity.</li> <li>The child will use a variety of manipulatives to make different quantities from 1 – 10.</li> </ol>
RESOURCES: CHILDREN'S	Anno, Mitsumasa, 1977. Anno's Counting Book.
LITERATURE	New York: Crowell Junior.
ELLENGIONE	New York Governation.
	Anno, Mitsumasa, 1982. <i>Anno's Counting House</i> .  New York: Philomel.
	Baker, K. <i>Quack and Count</i> . Bang, Molly, 1989. <i>Ten, Nine, Eight</i> . Orlando FI: Harcourt Brace Jovanovich.
	Carle, Eric, 1972. Rooster Off To See The World. Natick, MA: Picture Book Studio.
	Carter, David, 1988. <i>How Many Bugs in a Box</i> . New York: Simon & Schuster.
	Ehlert, Lois, 1990. <i>Fish Eyes</i> . Orlando Fl; Crowell Junior. Harcourt Brace Jovanovich.
	Yolen, Jane, 1976. An Invitation to the Butterfly



Ball. New York: Philomel.

# II. CONTENT STANDARD GEOMETRY, SPATIAL SENSE, AND MEASUREMENT

Making geometry and spatial awareness part of the classroom environment, materials and activities engage the child in daily routines, work and play.

**STANDARD:** The child will explore the world around him/her thinking about and working with geometric/spatial relationships and manipulating two-dimensional and three dimensional shapes.

**STANDARD:** The child will successfully use measurement to bridge the two main areas of mathematics – geometry and number.

ST	UDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
	To distinguish and name shapes and directions.	<ol> <li>The child will identify geometric shapes-circle, triangle, square- using puzzles and manipulatives.</li> <li>The child will identify the shape of common objects such as the table, a label, a bulletin board, etc. throughout the classroom environment.</li> <li>The child will converse that the shape of a circle is round, that a triangle has three sides, and that a square has four equal sides.</li> <li>The child will demonstrate and begin to use language of relative position of objects in environment and play situations:         <ul> <li>up</li> <li>down</li> <li>over</li> <li>under</li> <li>top</li> <li>bottom</li> <li>inside</li> <li>outside</li> <li>in front</li> <li>behind.</li> </ul> </li> <li>The child will construct with blocks and other materials while listening to oral directions. e.g., Place three blocks on top of each other.</li> <li>The child will follow oral directions playing "Simon Says". e.g., "Simon Says go under the chair." "Simon Says go behind the chair."</li> </ol>	
B.	To show an interest in comparing plane shapes and solids.	<ol> <li>The child will enjoy many toys for construction, exploration, and manipulation noting their shape and size:         ✓ Large and small blocks         ✓ Lego building blocks         ✓ Connectors and gears.</li> <li>The child will identify solid figures as having faces and edges</li> <li>The child will name solid figures:         ✓ Cube</li> </ol>	

	,
	✓ Sphere  ✓ Rectangular prism  ✓ Cylinder  ✓ Cone.  ✓ The child names plane shapes:  ✓ Circle  ✓ Diamond  ✓ Hearts  ✓ Ovals  ✓ Rectangle  ✓ Square  ✓ Star  ✓ Triangle  4. The child begins to use plane shapes separately to create pictures:  ✓ House  ✓ Car  ✓ Trees  ✓ Person  ✓ Clown  5. The child will measure objects one to another or use a measurement tool in play and in meaningful everyday activities.  6. The child will demonstrate and begin to use language of the relative position of objects in the environment and play situations:  ✓ Up  ✓ Down  ✓ Over  ✓ Under  ✓ Top  ✓ Bottom  ✓ Inside  ✓ Outside  ✓ In front  ✓ behind
C. To develop and apply units, systems, formulas, and appropriate tools to estimate and measure.	<ol> <li>The child will use descriptive words to compare objects:         ✓ Long or short         ✓ Light or heavy         ✓ Big or small.</li> <li>The child will use a variety of tools to explore measurement: scales, rulers, yardsticks, and clocks.</li> <li>The child will converse about the different times of day, upcoming events, and the sequence of events.</li> <li>The child will identify day, night, and week.</li> <li>The child will use language for yesterday, today, and tomorrow.</li> <li>The child will draw the activities of the day to</li> </ol>

# III. CONTENT STANDARD PATTERNS, FUNCTIONS, AND ALGEBRA

**STANDARD:** The child will explore and create patterns with a variety of materials.

**STANDARD:** Through activities of sorting, classifying, and ordering various objects by color, size, and shape, the child will create simple numeric patterns and translate from one representation to another.

ST	UDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A.	To sort, order and classify objects by one attribute.	<ol> <li>The child shows increasing abilities to match, sort, put in a series, and regroup objects according to one or two attributes such as shape and size.</li> <li>The child will sort and classify manipulatives according to color and size.</li> </ol>	
B.	To identify, copy, extend and create simple patterns or sequences of sounds, shapes and motions in the context of daily activities and play.	<ol> <li>The child will notice and copy simple repeating patterns in a song.</li> <li>The child will notice and duplicate a simple repeating pattern in a dance.</li> <li>The child will draw a simple repeating pattern.</li> <li>The child will make simple patterns with a variety of materials.</li> </ol>	
C.	To use play, physical materials or drawings to model simple patterns.	<ol> <li>The child sorts blocks, crayons, cars, etc by color and organizes them in a simple AB pattern.</li> <li>The child sorts various materials by size and creates a simple AB pattern.</li> <li>The child sorts beads by color and size and creates a necklace with an AB pattern.</li> </ol>	
	SOURCES: CHILDREN'S ERATURE	Berger, Barbara. 1984. <i>Grandfather Twilight</i> . New York: Philomel Books.  Carlstrom, Nancy White. 1986. <i>Jesse Bear, Jesse Bear, What Will You Wear</i> ? New York: Macmillan Publishing Company.  Degen, Bruce. 1983. <i>Jamberry</i> . New York: Harper & Row.  Martin, Bill, Jr. 1983. <i>Brown Bear, Brown Bear, What Do You See</i> ? New York: Henry Holt and Co.  Pluckrose, Henry. 1995. <i>Math Counts: Patterns</i> . New York: Scholastic.	

# IV. CONTENT STANDARD DATA ANALYSIS AND PROBABILITY

**STANDARD:** The child will demonstrate methods to collect, describe, and analyze, and record data is explored through hands-on activities.

**STANDARD:** The child will observe events, explore materials, collect, organize, and record information through drawings, maps, charts, and graphs.

STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENTS/NOTES
A. To pose questions and gather data about him/herself and his/her surroundings.	<ol> <li>The child asks questions of peers to collect data making a tally sheet. (How many girls are here today? How many boys are here today? etc.)</li> <li>The child graphs birthdays on the birthday chart.</li> </ol>	
B. To share questions, data, and predictions with peers and listen to the predictions of others with critical respect.	<ol> <li>The child participates in group brainstorming.</li> <li>The child works in cooperative groups to make predictions, gather, and communicate information.</li> </ol>	
C. To sort and classify objects according to their attributes and organize data about the objects.	<ol> <li>The child sorts blocks, crayons, cars, etc by color and organizes data about the objects to create a graph.</li> <li>The child places objects or information on a floor graph according to one attribute to determine whether or not two shapes or blocks are the same size or color.</li> <li>The child will demonstrate an increasing interest and awareness of numbers and counting as a means for solving problems and determining quantity.</li> <li>The child graphs objects on a floor graphing according to two attributes color and size.</li> </ol>	
D. To represent data using concrete objects, pictures, and graphs.	The child uses pictographs, bar graphs, and tally marks to represent data with teacher assistance.	
E. To discuss events related to his/her experiences as likely or unlikely.	The child will predict through graphing activities with the daily calendar and daily activities.	
RESOURCES: CHILDREN'S LITERATURE	Anno, Mitsumasa & Akihiro, Nozaki. 1985. <i>Anno's Hat Tricks</i> . New York: Philomel Books.	
	Crews, Donald. 1986. Ten Black Dots. New York: Greenwillow	
	Jenkins, S. & Page, R. What Do You With a Tail Like That?	
	Onishi, S. Who's Hiding?	

## THE CHILD AT AGE FOUR – SCIENCE

# I. SCIENTIFIC INQUIRY AGE FOUR

**STANDARD:** The child will develop curiosity, respect for life, willingness to take risks, perseverance, respect for data, and willingness to collaborate.

**STANDARD:** The child will look for patterns, see relationships, notice change, identify cause and effect, and see how form is related to function.

	STUDENT OBJECTIVES	ENABLING OUTCOMES	ASSESSMENT/ NOTES
Α.	To ask questions about objects, organisms, and events in their environment during shared stories, conversations, and play.	<ol> <li>The child will participate in scientific experiments where he/she asks questions to stimulate his/her curiosity. e.g., mixing baking soda and vinegar and feeling the bubbles; mixing food coloring to make secondary colors, or painting with water outdoors and watching it dry.</li> <li>The child will make predictions about the experiment.</li> <li>The child will raise questions about events around him/her using words such as: who, what, where, why, and how. e.g., How does a caterpillar become a butterfly? How does a chick come out of an egg?</li> </ol>	
В.	To predict what will happen next based on previous experiences.	<ol> <li>The child will test his/her ideas to predict what will happen next.</li> <li>The child will predict what happens next using a picture clue or illustrations.</li> <li>The child will predict what happens next relating to his/her life experience.</li> </ol>	
C.	To investigate natural laws acting upon objects, events and organisms.	<ol> <li>The child will investigate ways at the block center to explore ways to make small cars or trucks go faster.</li> <li>The child will explore ways to mix colors at the art center.</li> <li>The child will sort, compare, classify, and observe characteristics of objects, events, and organisms. e.g., Sort and classify objects that can roll. Observe what is the same and different about a cow and a dog. Sort living and non-living things.</li> </ol>	
D.	To use more of the senses to observe and learn about objects, organisms and phenomena for a purpose.	<ol> <li>The child will understand that information is gained when investigating with his/her senses:</li> <li>To touch</li> <li>To look</li> <li>To listen</li> </ol>	

E.	To explore objects, organisms and events using simple equipment.	To smell To taste  1. The child will explore objects, organisms and events using simple equipment such as: Hand lens Magnifying box Measuring tools (ruler, tape measure, thermometer, measuring cup) Eye droppers Scales
F.	To begin to make comparisons between objects or organisms based on characteristics.	<ol> <li>The child will engage in simple investigations including:         <ul> <li>Making predictions</li> <li>Gathering and interpreting data</li> <li>Recognizing simple patterns</li> <li>Drawing conclusions.</li> </ul> </li> </ol>
G.	To record or represent and communicate observations and findings through a variety of methods with assistance.	<ol> <li>The child will record observations, explanations, and ideas through multiple forms of representation including:         <ul> <li>Drawings</li> <li>Simple graphs</li> <li>Writing</li> <li>Movement.</li> </ul> </li> </ol>

## II. EARTH SCIENCE AGE FOUR

**STANDARD:** The child will explore earth science using his/her senses and a variety of tools and simple measuring devices to gather information, investigate materials, and observe processes and relationships of weather, seasons, the sun, moon and stars.

**STANDARD:** The child will observe and represent the ideas through play, art, and conversation using the appropriate scientific language.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	To explore weather naming	1.	The child will name the kinds of weather:	Scientific vocabulary:
	the different kinds of		Sunny	☆ Rainy
	weather.		Rainy	⇔ Windy
			Windy	⇔ Snowy
			Snowy.	⇔ Sunny
		2.	The child will observe and record the weather	
			daily at circle time.	
		3.	The child will draw his/her favorite type of weather.	
		4.	The child will sort and math pictures	
			identifying the same kind of weather.	

		<ul><li>5.</li><li>6.</li><li>7.</li><li>8.</li></ul>	The child will name the types of clothes he/she will wear on a:  Snowy day  Windy day  Sunny day  Rainy day.  The child will dramatize different types of extreme weather.  The child will understand that snowflakes are made up of many ice crystals.  The child will understand that no two snowflakes look alike.	
В.	To identify what occurs in nature and what people do in different seasons.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> </ol>	The child will name the four seasons:  Summer Fall Winter Spring. The child will take a simple survey among classmates to classify, compare, and communicate his/her favorite season. The child will take a nature identifying and describing what happens in nature during different seasons. The child will dramatize what people do in a particular season. The child will collaborate with a group of children to create a particular season using blocks, paper, and gears.	Scientific Vocabulary:  Summer Fall Winter Spring  Read: ANNO'S COUNTING BOOK by Mitsumasa Anno
C.	To recognize that the sun creates shadows and appears to move through the sky.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> </ol>	The child will experiment with an overhead projector observing how the shadow changes as he/she stands close to the light source: further away from the light source.  The child will create shadow puppets and put on a puppet show using the overhead projector to create the shadows.  The child will create shadows of tall block structures and using a flashlight to pretend it is the Sun he/she will see how the shadow changes the size/and position of the shadow.  The child will measure his/her friends' shadow.	Scientific Vocabulary:  Shadows Shade Heat Read: SHADOWS by Carolyn B. Otto
D.	To name elements of the night sky, such as the moon and stars, and understand that the night sky changes.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> </ol>	The child will describe what he/she sees in the night sky.  The child will describe how the moon changes shapes.  The child will create a journal of the different shapes of the moon.  The child will create a night sky collage showing the moon, stars, and some buildings.  The child will reproduce Van Gogh's STARRY	Scientific Vocabulary: Patterns Moon Stars Constellation charts  HOW MANY STARS IN THE SKY? Lenny Hort

	6.	NIGHT and explain how the night sky is different than the day sky. The child will dramatize traveling to the moon.	THE SKY IS FULL OF STARS Caroline Arnold THE MOON Michael Jay
E. To explore how weather varies depending upon where you live on Earth and which season it is.	1.	The child will make a list of things that children see, feel, hear, and wear during the winter in various places across the globe.	

## III. LIFE SCIENCE AGE FOUR

**STANDARD:** The child will expand his/her knowledge of life science by observing, describing, and discussing the natural world, living things, and natural process.

**STANDARD:** The child will develop increasing abilities to classify, compare, sequence, and contrast living things in their habitat as they grow, change, and protect themselves.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A	To understand that plants have parts that help them get what they need to grow and mature.	1. 2. 3. 4. 5. 6. 7.	The child will discover plant characteristics by observing and comparing plants and their parts. The child will match sets of different plants, fruits, and vegetables. The child will name the parts of a plant. The child will experiment sucking water through a straw and make the connection between tubes in a stem of a plant and a straw. The child will experiment with a celery stalk, placing it in colored water, observing what happens, and documenting the results. The child will create a picture by dipping pieces of cut potatoes and carrots into different colored tempera paints. The child will develop new scientific vocabulary by looking at different pictures of trees and describing the different parts of the trees:  Trunk Limbs Branches Needles Leaves Windy day Sunny day Rainy day	Scientific vocabulary:  Root Stem Leaf Seed Leaves Trunk Limbs Branches Needles
В.	To recognize that a plant needs air, water, light,	1.	The child will name the four things a plant needs to grow:	Scientific Vocabulary:

	and soil to grow.	Air	
	and son to grow.	∠ Light	≎ Water ≎ Soil
		<ul><li>Water</li><li>Soil.</li></ul>	₩ 20II
		2. The child will plant a seedling to begin to understand the function of roots and how	Read: <b>CARROT SEED</b> by
		important it is to provide water, light, air, and soil for the plant to grow.	Ruth Krauss
		3. The child will make a collage of a flower or plant using small pieces of construction paper.	
		4. The child will use nonstandard units to measure and journal the growth of the classroom plants.	
C.	To identify that plant's seeds are found in its	1. The child will place pictures of a plant growing in sequence.	Scientific Vocabulary:
	fruit, and that same type	<ol> <li>The child will sort and classify different plants:</li> </ol>	Seedling     Seedling
	of plant will grow from	flowers, fruits, and vegetables.	
	the seed.	3. The child will predict how many seeds are in an apple using unifix cubes.	<b>⇔</b> Flower
		4. The child will sort and classify different beans and create a collage.	
D.	To identify plants by their parts.	The child will classify and sort different plant picture cards with two attributes: flowers and no	Scientific Vocabulary:
	parts	flowers.	∴ Leaves
		2. The child will make a picture of his/her favorite	
		flower making the flower, stem, and leaves.  3. The child will make flowers out of pattern blocks	ೆ Flowers
		making a flower, steam, and leaves.	COUNTING
		4. The child will go on a nature walk and sort and classify different kinds of leaves.	<u>WILDFLOWERS</u> by Bruce McMillan
		5. The child will create leaf rubbings and note the	
		leaf patterns and write the name of the leaf with teacher assistance.	
		6. The child will describe how flowers are alike and	
		different.	
E.	To identify and explore	The child will identify common fruits and vegetables.	Scientific Vocabulary:
	plants that we eat and the foods that come from	<ol> <li>The child will create a recipe for vegetable soup.</li> </ol>	
	different plants.	3. The child will create fruits and vegetables with play dough.	3
F.	To understand the basic definition of an animal	The child will sort pictures noting if it is a plant or animal.	Scientific Vocabulary"
	and explore animals in	<ol> <li>The child will brainstorm and graph the different</li> </ol>	≎ Habitat
	his/her neighborhood.	types of animals he/she sees on the way to school.	
		3. The child will classify animals by discussing similarities and differences. e.g., the number of legs, does the animal have fur, does it have feathers, a beak, tail etc.	
		reactions, a bear, tail etc.	

G.	To learn about insects	4.	The child will create an animal mural showing the habitat of different animals. e.g., Birds – fly in the sky; dogs, cats, cows, horses – live on land; fish swim.  The child will describe insects as having 6 legs	Scientific Vocabulary:
G.	and arthropods, their attributes, and where they live.	2. 3. 4. 5.	and 3 body parts.  The child will note that the color of the bug offers protection from its enemies.  The child will describe an arthropod as having 8 legs. e.g., spider.  The child can collect and observe bugs.  The child will create a bug mask from a paper plate using scraps.	□ Insects □ Arthropods
H.	To understand the basic definition of a reptile, its, attributes, and where it lives.	1. 2. 3.	The child will describe reptiles as coldblooded animals, which means the body temperature changes with the air around them.  The child will understand reptiles have scaly skin.  The child will name a few reptiles:  Snakes  Lizards  Turtles.	Scientific Vocabulary:  Reptile Snake Lizard Mammal  THE YUCKY REPTILE ALPHABET by Jerry Pallotta
I.	To understand what animals need to survive.	1. 2. 3. 4. 5.	The child will create a pet journal describing how he/she cares for his/her pet. The child will dramatize common animal pet behaviors. The child will create a graph showing what type of pets they have. The child will create a Venn diagram showing what pets need air, water, food, and shelter. The child will discuss and compare what people and animals need to survive. The child will go on a walk outside and observe and collect data to discover where animals may live: under rocks, logs, piles of dead leave, in trees, bark, stems, and foundations of buildings.	Scientific Vocabulary:  Air  Water  Shelter  Food  Space  Read:  BIRDS BUILD NESTS by  Yvonne Winer
J.	To name animals that can fly, swim, or move on land.	1. 2. 3. 4. 5.	The child will make a list of animals that can fly. The child will describe how a fish uses fins to swim and a bird uses wings to fly. The child will make a bird feeder from a milk container and observe birds to learn about their behaviors and needs. The child will classify animals according to their movement. The child will discuss how wings and fins are alike and different. The child will discuss the difference between a bird and fish habitat.	Scientific Vocabulary:  Wings Fins Reef Camouflage  Read: THE MOUNTAIN THAT LOVED A BIRD by Alice McLerran

K.	To explore how animals protect themselves in their environment.	1. 2. 3.	The child will understand an animal is camouflaged when its color helps it blend in with its habitat.  The child will name common animals that use camouflage to stay safe: clownfish, fawn; moth; butterfly.  The child will name ways animals stay safe from predators. e.g., quills on a porcupine; turtle's shell; baby kangaroo in mother's pouch.  The child will create with a partner a camouflage collage using paper and crayons.  The child will create animals with play dough.	Scientific Vocabulary: Camouflage  Read: How Animal Babies Stay Safe by Mary Ann Fraser
L.	To describe how animals grow and change as they mature.	1. 2. 3. 4.	The child will discuss how various animals and living things grow and change. The child will discuss and draw the cycle of living things. The child will make a book showing how the life cycle of the <b>Hungry Caterpillar</b> . The child will draw a picture of how he/she has changed since being a baby.	Scientific Vocabulary: Grow Change  Read: Make Way For Ducklings by Robert McCloskey The Hungry Caterpillar by Eric Carle
M.	To explore the relationships between people and animals.	1. 2. 3.	The child will describe the variation and diversity of living things.  The child will describe how people are alike and different from other living things.  The child will use blocks to create a model of a farm adding tools, food, and other necessities for animals to live on the farm.	Read: The Year At Maple Hill Farm by Alice and Martin Provensen

## IV. PHYSICAL SCIENCE AGE FOUR

**STANDARD:** The child will explore physical science using his/her senses and a variety of tools and simple measuring devices to gather information, to investigate materials, to discuss common properties, differences, and comparisons among three different states of matter: liquid, solid, and gas.

**STANDARD:** The child will explore motion through playful experiments to test observations and draw conclusions on how things move.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSES	SMENT/ NOTES
A.	To explore identify and explore the ways he/she can use and change paper and cloth.	1. 2.	The child will make a graph observing and comparing if the following can be bent, folded, torn, or cut paper and/or cloth.  The child will make a paper chain to show how paper can be bent to make a chain.  The child will brainstorm and find items or		ic vocabulary: Bend Fold Tear Cut
			objects made of paper or cloth in the classroom		

		<ul><li>and place them on a graph showing if they were: bent, folded, torn, or cut to become what they are now.</li><li>4. The child will understand how paper is recycled.</li></ul>	Read: THE STORY PAPER by Ying Chang Compestine
В.	To identify and explore the ways he/she can use and change natural resources such as wood and metal.	<ol> <li>The child will make a Venn Diagram observing and classifying if an object is made of metal or wood. e.g., Stapler, pencil, block, etc.</li> <li>The child will sort and count different types of screws and metal objects.</li> <li>The child will make a book showing how we use wood and metal.</li> <li>The child will create a sculpture using wood and wire.</li> <li>The child will manipulate different forms of metal to make an interesting art piece.</li> </ol>	Scientific Vocabulary:
C.	To identify that clay is a natural resource that comes from the earth and that he/she can manipulate it to make things.	<ol> <li>The child will create a sculpture with play dough or clay and observe and communicate how it feels, how it can change, and how it smells.</li> <li>The child will make patterns with play dough or clay.</li> <li>The child will use describe words to describe how clay/play dough feels: soft; gooey; wet; warm; cold; soft.</li> <li>The child will observe how matter can change form with heat by making Baker's Clay. (The child can observe that Baker's Clay can be painted!)</li> </ol>	Scientific Vocabulary: Clay  Read: The Pot That Juan Built by Nancy Andrews- Goebel Recipe for Baker's Clay: 4 cups of flour 1 cup of salt 1 ½ cups water Preheat oven to 350 degrees. Mix the flour salt, water. Knead dough as desired. Bake at 350 degrees for 1 hour.
D.	To identify water as a natural resource and explore the properties and changing states of water.	<ol> <li>The child will observe, predict, and infer the changes of an ice cube from solid to liquid.</li> <li>The child will investigate what happens when water is mixed with food coloring and placed in a freezer.</li> <li>The child will identify the sources of water: clouds, snow, ice, air, and water.</li> <li>The child will explore different objects noting on a graph if they can sink or float.</li> <li>The child will identify what will happen when water is heated or frozen.</li> </ol>	Scientific Vocabulary:  Solid  Liquid  Gas  Sink Float  Down Comes The Rain by Franklyn M. Branley
E.	To recognize that wheels affect speed and motion and make moving easier.	<ol> <li>The child will observe and discuss how certain objects and things move: train, car, wind-up toy, toy truck, roller skates, skate board, and sled.</li> <li>The child will sort different cards showing how they move.</li> <li>The child will name and list things that have</li> </ol>	Scientific Vocabulary:

		wheels.  4. The child will make roads and ramps in the block area to communicate how different sizes and more materials make the vehicle move slower or faster.	Cowen-Fletcher
F.	To explore ways objects move and forces that cause movement.	<ol> <li>The child will sort geometric solids to predict, compare, and infer if they roll or slide.</li> <li>The child will describe how toys move: a top – spins; a marble – rolls; a toy car is pushed; etc.</li> <li>The child will observe, predict, investigate, compare, and infer if certain things roll or slide: e.g., crayon, plastic cup, ball, square block, etc.</li> <li>The child will sort and classify things that roll and slide.</li> </ol>	Scientific Vocabulary"  Slide Roll Push Pull Force Read: Cinnamon's Day Out Susan L. Rothe
G.	To describe sounds and understand how they are made.	<ol> <li>The child will close his/her eyes predicting if the sound heard is loud or soft.</li> <li>The child will make sound patterns with common musical instruments.</li> <li>The child will look at pictures of common environmental sounds and tally if they are loud or soft.</li> <li>The child will understand that sound is made from vibrations.</li> <li>The child will create a music box by decorating a tissue box and slipping three or four different widths and lengths of rubber bands to investigate the sounds made by vibrations.</li> </ol>	Scientific Vocabulary:  Vibration  Loud  Soft  The Listening Walk by Paul Showers  Sound Experiements by Ray Broekel
H.	To recognize that magnets can be used to make some objects move without being touched	<ol> <li>The child will discover and record magnetic and nonmagnetic items taking a walk around the classroom.</li> <li>The child will use one-to-one correspondence to compare the number of paperclips that can be picked up with different various types of magnets.</li> </ol>	Scientific Vocabulary:  Magnet  Mickey's Magnet  Franklyn M. Branley and Eleanor K. Vaughan

## THE CHILD AT AGE FOUR – SOCIAL STUDIES

I. INQUIRY AGE FOUR

**STANDARD:** The child will explore concepts of likenesses and differences among cultural groups through school subjects such as language arts, mathematics, science, music, and art. Through experience, observation, and reflection, the early learner identifies elements of culture that allows for the study of people, places, and environment among cultural groups across time and place and through cultural celebrations.

Please note: The National Council for Social Studies gives an updated list of books and references for all grade levels each year in all areas of the standards. This resource can be found: <a href="http://www.ncss.org/resources/notable">http://www.ncss.org/resources/notable</a>

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will identify herself/himself as an individual.	<ol> <li>The child will recognize that he/she is an individual and no one else is like him/her.</li> <li>The child will draw a self-portrait and list his/her special talents.</li> <li>The child will dictate a prayer of thanking god for a unique trait of him/herself (talented artist, athletic ability, sense of humor etc.).</li> </ol>	Su Box <u>You are very</u> <u>Special</u> 2000  Marian Wright Edelman, <u>I Can Make A</u> <u>Difference</u> 2005
В.	The child will recognize herself/himself as a member of a family.	<ol> <li>The child will draw and label members of his/her family.</li> <li>The child will graph and compare how families vary in size and composition.</li> </ol>	
C.	The child will describe herself/himself as a member of a family who has the same human needs as others.	<ol> <li>The child will create a family flag showing all families need: food, shelter, and love.</li> <li>The child will investigate, compare, and contrast families around the world.</li> <li>The child will create a booklet sharing family customs and traditions.</li> <li>The child will share family stories, traditions, and customs evidenced by pictures and other personal artifacts.</li> </ol>	Vocabulary words: heritage, customs, traditions

### II. TIME, CONTINUITY, AND CHANGE

"Social studies programs should include experiences that provide for the study of the past and its legacy." National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to locate herself/himself in time and space. Historical thinking begins for the early learner with a clear sense of time – past, present, and future – and becomes more precise as the child progresses. Historical thinking includes skills such as locating, researching, analyzing, and interpreting primary and secondary sources so that the child can begin to understand relationships among events and draw conclusions.

**STANDARD:** The child will recognize that stories can be told in different ways, describing events that happened today or yesterday through the use of children's literature.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
Α.	The child will associate words with time that are meaningful in the context of daily classroom routines.	2.	The child will use and respond to language of time as related to daily schedules and routines such as:  day night yesterday today tomorrow next before soon after now and later.  The child will record classroom events and experiences on a monthly calendar.	For diverse learners resources based on the Universal Design for Learning principles are available at www.cast.org.
В.	The child will develop an understanding of chronology by using the language of time to share personal episodes and talk about personal memorabilia.	1. 2. 3.	The child will use photos and artifacts to illustrate personal stories.  The child will use growth charts to show how he/she has changed over time.  The child will use technology, (with teacher assistance), throughout the year to record or document herself/himself and family members from the beginning to the end of the year.	

### III. PEOPLE, PLACES, AND ENVIRONMENTS

"Social studies programs should include experiences that provide for the study of people, places and environments." National Curriculum Standards for Social Studies

**STANDARD:** The child will understand the relationship between people around the world and the physical world.

**STANDARD:** The child will begin to draw upon immediate personal experiences in his/her neighborhood, town or city, and state, as well as peoples and places distant and unfamiliar, to explore geographic concepts and skills. Spatial thinking examines the relationship among peoples, places and environments by mapping and graphing

geographic data. Geographic data are compiled, organized, stored and made visible by using traditional and geospatial technologies.

**STANDARD:** The child will be able to access, read, interpret and create maps and other geographic representations as tools of analysis to study global connections and interdependence.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ CONTENT NOTES
A.	The child will use terms related to location, direction and distance in understanding relative location (the location of a place in relation to other places).	<ol> <li>The child will use location vocabulary during daily routines, classroom experiences, and play. The words are examples of location vocabulary:         <ul> <li>✓ up</li> <li>✓ down</li> <li>✓ over</li> <li>✓ under</li> <li>✓ front</li> <li>✓ back</li> <li>✓ here</li> <li>✓ behind</li> <li>✓ and in front of.</li> </ul> </li> <li>The child will give directions using relative location terms.</li> </ol>	Suggested activity: play Simon Says
B.	The child will recognize that he/she is a member of a group.	1. The child will name different groups: family, groups of friends, members of the prek 4, boys, girls etc.	
C.	The child will identify characteristics of groups and organize them by similarities.	<ol> <li>The child will organize groups by age.</li> <li>The child will organize groups by physical characteristics.</li> <li>The child will create a booklet organizing classmates by favorite games, pets, or how many siblings are in his/her family.</li> <li>The child will locate a place on the globe where people may dress or speak differently from himself/herself.</li> <li>The child will discuss how people may have different ideas, eat different foods, or enjoy different types of dances.</li> </ol>	
D.	The child will recognize that a globe or a map is used to help people locate places.	<ol> <li>The child will make a map of his/her school showing that it is a model of his/her school.</li> <li>The child will draw a globe showing that a globe is a model of the earth.</li> <li>The child will build with blocks of model of his/her town/city.</li> </ol>	CD My First Amazing World Explorer DK Multimedia Windows and Macintosh
E.	The child will recognize places in the immediate environment specific physical and humanmade features.	<ol> <li>The child will identify features on a globe such as: mountains, rivers, and hills.</li> <li>The child will identify on a map streets, buildings, and parks.</li> </ol>	

F.	The child will discuss the role of transportation in a community.	2.	The child will name different forms of transportation as a means of traveling from place to place.  The child will graph ways in which classmates travel to school.	
G.	The child will describe how people around the world adapt to their immediate environment.	1.	The child will draw the appropriate clothing to be worn for the different seasons.  The child will compare clothing worn in Africa to clothing worn in the USA.	Mem Fox <u>Shoes From</u> <u>Gandpa</u> 1989

## IV. INDIVIDUAL DEVELOPMENT AND IDENTITY

"Social studies programs should include experiences that provide for the study of individual development and identity." National Curriculum Standards for Social Studies

**STANDARD:** The child will develop his/her personal identity in the context of family, peers, school, and community. Central to this development are the exploration, identification, and analysis of how individuals and groups are alike and how they are unique, as well as how they relate to each other in supportive and collaborative ways.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ CONTENT NOTES
A.	The child will identify herself/himself as an individual and as a member of a family that have the same human needs as others.	<ol> <li>The child will make a book identifying members of his/her family and the ways they meet their human needs for food, clothing, shelter, and other commonalities, such as recreation, stories, and music.</li> </ol>	
В.	The child will identify similarities and differences in people, characteristics, habits, etc.	<ol> <li>The child will graph classmate's eyes and hair color.</li> <li>The child will make a graph of peers favorite sports or games.</li> </ol>	Suggested Activity: "Mystery Voice" (students voices can be recorded on a tape or the computer and students identify each other's unique voice).
C.	The child will share family heritage through family stories, traditions and customs.	<ol> <li>The child will share family stories, traditions, and customs by pictures and personal artifacts.</li> <li>The child will invite family members to come to the classroom to share traditions and customs that reflect customs and traditions.</li> </ol>	

## V. INDIVIDUALS, GROUPS, AND INSTITUTIONS

"Social studies programs should include experiences that provide for the study of interactions among individuals, groups, and institutions."

National Curriculum Standards for Social Studies

**STANDARD:** The child will be given opportunities in social studies to influence his/her thinking as he/she examines his/her role in civic participation that embraces the ideal that an individual actively engages in his or her community, church, state, or nation for the common good. (The social studies program encourages the early learner to practice effective communication skills including negotiation, compromise, and collaboration. Skills in accessing and analyzing information are essential for citizens in democracy.)

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will practice cooperative behavior as he/she is introduced to	<ol> <li>The child will participate in meaningful conversations about the importance of cooperation in a group.</li> </ol>	
	civic participation through group work and	<ol><li>The child will create a list of ways he/she can cooperate when working in groups.</li></ol>	
	play.	<ul> <li>3. The child will discuss key words:</li> <li>✓ Sharing</li> <li>✓ Taking turns</li> <li>✓ Helping</li> <li>✓ Listening.</li> </ul>	
		<ol> <li>The child will use dramatic play or puppets to demonstrate sharing, turn-taking, helping, negotiating, and listening.</li> </ol>	
B.	The child will demonstrate and understanding of	1. The child will use pictures, symbols, and words next to peers and staff names to depict roles and jobs in the classroom.	Center for the Social Emotional Foundations for Early Learning
	individual responsibilities within a group.	2. The child will brainstorm and create a list on the theme: How can we help each other	(CSEFLEL) http://csefel.vanderbuil t.edu/ Follow the link for "Teachers/Caregivers" for free resources about developing social skills in young children. Resources are also available for parents.

## VI. POWER, AUTHORITY, AND GOVERNANCE

"Social studies programs should include experiences that provide for the study of how people create, interact with, and change structures of power, authority, and governance."

National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to understand individual rights, responsibilities to others, the needs of social groups, and concepts of a just society so he/she can become effective problem-solvers and decision makers. (An introduction integrating the seven principals of **Catholic social teaching** encourages the early learner to be an ambassador of the Good News and to promote positive societal change.)

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ CONTENT NOTES
A.	The child will understand the seven principles of Catholic social teaching.	The child will recognize THE LIFE AND DIGNITY of others by treating others with respect and kindness because God created all people. WE ARE ALL SPECIAL!	A unit on the Seven Principles of Catholic Social Teaching Iforgetta- sheffield@olmschool.co m
В.	The child will participate in civic participation through cooperative problem-solving.	The child will engage in free play and brainstorm rules that will help everyone play well together.	
C.	The child will recognize that coopering includes helping, turn-taking, sharing, comforting, and compromising.	<ol> <li>The child will role-play negotiation skills in everyday situations.</li> <li>The child will work in a group and discuss how he/she can work and play together. The group will create a booklet showing how they will work together.</li> </ol>	
D.	The child will understand that schools and classrooms have rules and routines that govern daily life.	<ol> <li>The child will compare rules in the classroom with rules in families and communities.</li> <li>The child will create rules with positive expectations for behavior in school.</li> <li>The child will assist in posting the rules in strategic parts of the room.</li> <li>The child will define and identify rules within schools and communities.</li> </ol>	
E.	The child will understand that choices have consequences.	<ol> <li>The child will use puppets to act out situations that show when we make decisions and choices can result in a consequence.</li> <li>The child will participate in group meetings to solve a classroom problem and suggest possible solutions.</li> </ol>	

## VII. PRODUCTION, DISTRIBUTION, AND CONSUMPTION

"Social studies programs should include experiences that provide for the study of how people organize for the production, distribution, and consumption of goods and services."

National Curriculum Standards for Social Studies

**STANDARD:** The child will investigate, communicate, and recognize that everyone has certain wants and needs. The early learner learns to communicate those wants and to make acceptable decisions about how to satisfy them within the context of family and classroom.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will recognize that people make choices because of unlimited economic wants.	<ol> <li>The child will identify that goods are things that people make and grow.</li> <li>The child will demonstrate an ability to make choices for daily needs and wants.</li> </ol>	
B.	The child will identify that materials/resources are used to make products.	<ol> <li>The child will name different types of occupations.</li> <li>The child will write a thank you note to local community servants.</li> <li>The child makes a class book of different occupations from A to Z.</li> <li>The child will associate tools, uniforms, and vehicles with the appropriate worker.</li> <li>The child will show through drawings and block building the steps it takes to make a product.</li> </ol>	Judith St. George and David Small <u>So You</u> <u>Want to Be President?</u> Caldecott Medal 2000
C.	The child will identify how goods are acquired.	<ol> <li>The child will participate in activities as a buyer and seller through the creation of a class store or restaurant.</li> <li>The child will identify economic activities that use resources in the local region.</li> <li>The child will identify that coins and bills are money.</li> <li>The child will identify that money is used to buy goods.</li> </ol>	Trips to local apple orchards; local farms; local stores or markets.
D.	The child will make economic decisions as a consumer, producer, saver, investor, and citizen.	<ol> <li>The child will list the differences between the basic needs and wants:         <ul> <li>✓ Food</li> <li>✓ Clothing</li> <li>✓ Shelter</li> </ul> </li> <li>Affection versus toys and sweets.</li> <li>The child will discuss why people earn, spend, and save money.</li> </ol>	Invite a banker to come and discuss various ways to save money.

## VIII. SCIENCE, TECHNOLOGY, AND SOCIETY

"Social studies programs should include experiences that provide for the study of relationships among science, technology, and society." National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to understand how science and technologies influence beliefs, knowledge, and their daily lives. The child studies how basic technologies such as telephones, ships, automobiles, and airplanes have evolved and how we have employed technology such as air conditioning, dams, and irrigation to modify our physical environment and contribute to changes in global health and economics.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will investigate and initiate inquiry by developing a question by completing prompts.	<ol> <li>The child will complete prompts, "I wonder? Why?         And how is this like this?" as they investigate the         development of transportation: trains, ships,         airlines, trucking etc.</li> <li>The child will list ways of communicating with one         another and question the progress made in these         areas.</li> </ol>	Jane Elliot and Colin King <u>The Usborne</u> <u>Children's Encyclopedia</u> 1998
B.	The child will develop a hypothesis, thesis, or research by identifying resources, observation, and recording observations in areas of science and technologies.	<ol> <li>The child will identify resources for finding answers to their questions:         <ul> <li>Books,</li> <li>Videos,</li> <li>People.</li> </ul> </li> <li>The child will explain what their jobs will be during inquiry investigation:         <ul> <li>Draw pictures of how transportation has changed over the years.</li> </ul> </li> <li>Draw and label pictures about our field trip to the airport, train station, bus station, trolley museum, etc.</li> <li>The child will identify ways he/she will show what he/she has learned by:         <ul> <li>Building with blocks,</li> <li>Drawing a picture,</li> <li>Making a book</li> <li>Developing a time line</li> <li>Completing a puzzle.</li> </ul> </li> </ol>	Faith McNulty If You Decide To Go to the Moon 2005  Bobbie Kalman & Niki Walker Space 1997  CD Sammy's Science House Windows and Macintosh Edmark  CD Trudy's Time And Place House Windows and Macintosh Edmark  World Book Encyclopedia Presents Space Travel Windows and Macintosh Multimedia
C.	The child will conduct research by following directions, asking questions, observations, and recording observations.	<ol> <li>The child will follow directions to complete an inquiry.</li> <li>The child will investigate by asking questions and observing.</li> <li>The child will record observations with:         <ul> <li>✓ Words,</li> <li>✓ Numbers,</li> <li>✓ Symbols,</li> </ul> </li> </ol>	

teacher in a table.)
----------------------

#### IX. GLOBAL CONNECTIONS

"Social studies programs should include experiences that provide for the study of global connections and interdependence." National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to use various media and first-hand experiences to help the child become aware of how things might happen in one part of the world and impact other parts of the world. (Within this context, the early learner examines and explores various types of global connections as well as basic issues and concerns.)

**STANDARD:** The child will develop responsive action plans, such as becoming e-pals with a class in another part of the world.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will show an	1.	The child will make a drawing showing how we	Linda Schwartz <b>Earth</b>
	understanding of human		care for God's creation.	Book for Kids 1990
	interaction with	2.	The child will identify ways in which he/she will	
	environment over time.		take care of the environment.	Thank You, God! A
		3.	The child will identify and list recyclable items.	Year of Blessings and
		4.	The child will list ways in which we hurt our	Prayers for Little Ones
			environment. (eg. Littering)	Sophie Allsopp
		5.	The child will brainstorm ways he/she can care for	
			the physical environment at school and home.	
		6.	The child will help plant a school garden.	

## X. CIVIC IDEALS AND PRACTICES

"Social studies programs should include experiences that provide for the study of ideals, principles, and practices of citizenship in a democratic republic."

National Curriculum Standards for Social Studies

**STANDARD:** The child will begin to understand civic ideals and practices through activities such as helping to set classroom expectations, examining experiences in relation to ideals, participating in mock elections, and determining how to balance the needs of individuals and the group. (During these years the child experiences views of citizenship in other times and places through stories and drama.)

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will understand	1.	The child will compare rules in the classroom with	
	that schools and		rules in families and communities.	
	classrooms have rules	2.	The child will create rules with positive	
	and routines that govern		expectations for behavior in school.	
	daily life.	3.	The child will assist in posting the rules in strategic	

		4.	parts of the room.  The child will define and identify rules within schools and communities.	
B.	The child will understand	1.	The child will name holidays that are significant in	Resource:
	that chronology provides		his/her daily life.	OF THEE I SING: A
	the scaffolding for	2.	The child will list the contributions of historical	Letter To My
	organizing historical		figures such as Christopher Columbus, George	<b>Daughters</b> Barack
	thinking.		Washington, and Abraham Lincoln.	Obama
		3.	The child will make a book recording the	
			contributions of Martin Luther King Jr. and Mother	Lynne Cheney America:
			Teresa as role models of Peace.	A Patriotic Primer 2002
		4.	The child will compare Christmas traditions around	
			the world using a Venn diagram.	Kate Waters Samuel
		5.	The child will name celebrations and holidays	Eaton's Day: A Day in
			important to the school community.	the Life of a Pilgrim
		6.	The child will name current civil and church	<b>Boy</b> 1993
			leaders.	
				Kate Waters <u>Sarah</u>
				Morton's Day: A Day in
				the Life of a Pilgrim Girl
				1993



## THE CHILD AT AGE THREE – SCIENCE

# I. SCIENTIFIC INQUIRY AGE THREE

**STANDARD:** The child will develop curiosity, respect for life, willingness to take risks, perseverance, respect for data, and willingness to collaborate.

**STANDARD:** The child will actively look for patterns, see relationships, notice change, identify cause and effect, and see how form is related to function.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
Α.	The child will ask questions about objects, organisms, and events in their environment during shared stories, conversations, and play.	<ol> <li>The child will participate in scientific experiments where he/she asks questions to stimulate his/her curiosity. (e.g., mixing baking soda and vinegar and feeling the bubbles; mixing food coloring to make secondary colors, or painting with water outdoors and watching it dry).</li> <li>The child will make predictions about the experiment.</li> <li>The child will raise questions about events around him/her using words such as: who, what, where, why, and how. (e.g., How does a caterpillar become a butterfly? How does a chick come out of an egg?)</li> </ol>	
В.	The child will predict what will happen next based on previous experiences.	<ol> <li>The child will test his/her ideas to predict what will happen next.</li> <li>The child will predict what happens next using a picture clue or illustrations.</li> <li>The child will predict what happens next relating to his/her life experience.</li> </ol>	
C.	The child will investigate natural laws acting upon objects, events and organisms.	<ol> <li>The child will investigate ways at the block center to explore ways to make small cars or trucks go faster.</li> <li>The child will explore ways to mix colors at the art center.</li> <li>The child will sort, compare, classify, and observe characteristics of objects, events, and organisms. e.g., Sort and classify objects that can roll. Observe what is the same and different about a cow and a dog; sort living and non-living things.</li> </ol>	
D.	The child will use his or her senses to observe and learn about objects, organisms and phenomena for a purpose.	<ol> <li>The child will understand that information is gained when investigating with his/her senses:</li> <li>To touch</li> <li>To look</li> <li>To listen</li> <li>To smell</li> <li>To taste.</li> </ol>	

E.	The child will explore objects, organisms and events using simple equipment.	1. The child will explore objects, organisms and events using simple equipment such as:  ✓ Hand lens ✓ Magnifying box ✓ Measuring tools (ruler, tape measure, thermometer, measuring cup) ✓ Eye droppers
F.	The child will begin to make comparisons between objects or organisms based on characteristics.	<ul> <li>✓ Scales</li> <li>The child will engage in simple investigations including:</li> <li>✓ Making predictions</li> <li>✓ Gathering and interpreting data</li> <li>✓ Recognizing simple patterns</li> <li>✓ Drawing conclusions.</li> </ul>
G.	The child will record or represent and communicate observations and findings through a variety of methods with assistance.	<ol> <li>The child will record observations, explanations, and ideas through multiple forms of representation including:</li></ol>

# II. EARTH SCIENCE AND SPACE AGE THREE

**STANDARD:** The child will explore earth science using his/her senses and a variety of tools and simple measuring devices to gather information, investigate materials, and observe processes and relationships of weather, seasons, the sun, moon and stars.

**STANDARD:** The child will observe and represent the ideas through play, art, and conversation using the appropriate scientific language.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSES	SMENT/ NOTES
A.	The child will explore	1.	The child will name the kinds of weather:	Scientif	ic vocabulary:
	weather naming the		Sunny	≎	Rainy
	different kinds of		Rainy	≎	Windy
	weather.		Windy	≎	Snowy
			Snowy.	≎	Sunny
		2.	The child will observe and record the weather daily		
			at circle time.		
		3.	The child will draw his/her favorite type of weather.		
		4.	The child will name the types of clothes he/she will		
			wear on a		
			Snowy day		
			Windy day		
			Sunny day		
			Rainy day.		

		<ul><li>5.</li><li>6.</li><li>7.</li></ul>	The child will dramatize different types of extreme weather. The child will understand that snowflakes are made up of many ice crystals. The child will understand that no two snowflakes look alike.	
В.	The child will identify what occurs in nature and what people do in different seasons.	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> </ol>	The child will name the four seasons:  Summer  Fall  Winter  Spring.  The child will take a simple survey among classmates to classify, compare, and communicate his/her favorite season.  The child will take a nature walk identifying and describing what happens in nature during different seasons.  The child will dramatize what people do in a particular season.	Scientific Vocabulary:  Summer  Fall  Winter  Spring  Read: ANNO'S  COUNTING BOOK by  Mitsumasa Anno
C.	The child will recognize that the sun creates shadows and appears to move through the sky.	2.	The child will experiment with an overhead projector observing how the shadow changes as he/she stands close to the light source: further away from the light source.  The child will create shadow puppets and put on a puppet show using the overhead projector to create the shadows.	Scientific Vocabulary:  Shadows Shade Heat Read: SHADOWS by Carolyn B. Otto
D.	The child will name elements of the night sky, such as the moon and stars, and understand that the night sky changes.	1. 2. 3. 4.	The child will describe what he/she sees in the night sky. The child will describe how the moon changes shapes. The child will create a journal of the different shapes of the moon. The child will create a night sky collage showing the moon, stars, and some buildings. The child will dramatize traveling to the moon.	Scientific Vocabulary: Patterns Moon Stars Constellation charts

# III. LIFE SCIENCE AGE THREE

**STANDARD:** The child will expand his/her knowledge of life science by observing, describing, and discussing the natural world, living things, and natural process.

**STANDARD:** The child will develop increasing abilities to classify, compare, sequence, and contrast living things in their habitat as they grow, change, and protect themselves.

	STUDENT OBJECTIVE	ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will understand that plants have parts that help them get what they need to grow and mature.	<ol> <li>The child will discover plant characteristics by observing and comparing plants and their parts.</li> <li>The child will match sets of different plants, fruits, and vegetables.</li> <li>The child will name the parts of a plant.</li> <li>The child will experiment sucking water through a straw and make the connection between tubes in a stem of a plant and a straw.</li> <li>The child will experiment with a celery stalk, placing it in colored water, observing what happens, and documenting the results.</li> <li>The child will create a picture by dipping pieces of cut potatoes and carrots into different colored tempera paints.</li> </ol>	Scientific vocabulary:  Root Stem Leaf Seed
В.	The child will recognize that a plant needs air, water, light, and soil to grow.	<ol> <li>The child will name the four things a plant needs to grow:         <ul> <li>Air</li> <li>Light</li> <li>Water</li> <li>Soil.</li> </ul> </li> <li>The child will plant a seedling to begin to understand the function of roots and how important it is to provide water, light, air, and soil for the plant to grow.</li> <li>The child will make a collage of a flower or plant using small pieces of construction paper.</li> </ol>	Scientific Vocabulary:  Air  Light  Water  Soil  Read: CARROT SEED by Ruth Krauss
C.	The child will identify that plant's seeds are found in its fruit, and that same type of plant will grow from the seed.	<ol> <li>The child will place pictures of a plant growing in sequence.</li> <li>The child will sort and classify different plants: flowers, fruits, and vegetables.</li> <li>The child will predict how many seeds are in an apple.</li> </ol>	Scientific Vocabulary:  Seed Seedling Fruit Flower
D.	The child will identify plants by their parts.	<ol> <li>The child will classify and sort different plant picture cards with two attributes: flowers and no flowers.</li> <li>The child will make a picture of his/her favorite flower making the flower, stem, and leaves.</li> <li>The child will make flowers out of pattern blocks making a flower, stem, and leaves.</li> <li>The child will go on a nature walk and sort and</li> </ol>	Scientific Vocabulary:  Leaf Leaves Flower Flowers  COUNTING WILDFLOWERS by

E.	The child will identify and explore plants that we eat and the foods that come from different plants.	classify different kinds of leaves.  The child will create leaf rubbings and note the leaf patterns.  The child will describe how flowers are alike and different.  The child will identify common fruits and vegetables.  The child will create fruits and vegetables with play dough.	Scientific Vocabulary:
F.	The child will understand the basic definition of an animal and explore animals in his/her neighborhood.	<ol> <li>The child will sort pictures noting if it is a plant or animal.</li> <li>The child will brainstorm and graph the different types of animals he/she sees on the way to school.</li> <li>The child will classify animals by discussing similarities and differences. e.g., the number of legs, does the animal have fur, does it have feathers, a beak, tail etc.</li> <li>The child will create an animal mural showing the habitat of different animals. e.g., Birds – fly in the sky; dogs, cats, cows, horses – live on land; fish swim.</li> </ol>	Scientific Vocabulary"  Animal Habitat
G.	The child will understand what animals need to survive.	<ol> <li>The child will create a pet journal describing how he/she cares for his/her pet.</li> <li>The child will dramatize common animal pet behaviors.</li> <li>The child will create a graph showing what type of pets they have.</li> <li>The child will create a Venn diagram showing what pets need air, water, food, and shelter.</li> <li>The child will discuss and compare what people and animals need to survive.</li> </ol>	Scientific Vocabulary: Air Water Shelter Food Space  Read: BIRDS BUILD NESTS by Yvonne Winer
Н.	The child name animals that can fly, swim, or move on land.	<ol> <li>The child will make a list of animals that can fly.</li> <li>The child will describe how a fish uses fins to swim and a bird uses wings to fly.</li> <li>The child will make a bird feeder from a milk container and observe birds to learn about their behaviors and needs.</li> <li>The child will classify animals according to their movement.</li> </ol>	Scientific Vocabulary:  Wings Fins  Read: THE MOUNTAIN THAT LOVED A BIRD by Alice McLerran
I.	The child will describe how animals grow and change as they mature.	<ol> <li>The child will discuss how various animals and living things grow and change.</li> <li>The child will discuss and draw the cycle of living things.</li> <li>The child will make a book showing how the life cycle of the HUNGRY CATERPILLAR.</li> <li>The child will draw a picture of how he/she has</li> </ol>	Scientific Vocabulary: Grow Change Read: Make Way for Ducklings by Robert McCloskey

			changed since being a baby.	The Hungry Caterpillar by Eric Carle
J.	The child will explore the relationships between people and animals.	1. 2. 3.	The child will describe the variation and diversity of living things.  The child will describe how people are alike and different from other living things.  The child will use blocks to create a model of a farm adding tools, food, and other necessities or animals to live on the farm.	Read: THE YEAR AT MAPLE HILL FARM by Alice and Martin Provensen

## IV. PHYSICAL SCIENCE AGE THREE

**STANDARD:** The child will explore physical science using his/her senses and a variety of tools and simple measuring devices to gather information, to investigate materials, to discuss common properties, differences, and comparisons among three different states of matter: liquid, solid, and gas.

**STANDARD:** The child will explore motion through playful experiments to test observations and draw conclusions on how things move.

	STUDENT OBJECTIVE		ENABLING OUTCOMES	ASSESSMENT/ NOTES
A.	The child will identify and explore the ways he/she	1.	The child will make a graph observing and comparing if the following can be bent, folded,	Scientific vocabulary: ウ Bend
	can use and change paper		torn, or cut:	⇔ Fold
	and cloth.		📤 Paper	🜣 Tear
			Cloth.	⇔ Cut
		2.	The child will make a paper chain to show how paper can be bent to make a chain.	
		3.	The child will brainstorm and find items or	Read:
			objects made of paper or cloth in the classroom	THE STORY PAPER by
			and place them on a graph showing if they	Ying Chang Compestine
			were: bent, folded, torn, or cut to become what	
			they are now.	
В.	The child will identify and	1.	The child will make a Venn Diagram observing	Scientific Vocabulary:
	explore the ways he/she		and classifying if an object is made of metal or	☼ Wood
	can use and change		wood. e.g., Stapler, pencil, block, etc.	<b>⇔</b> Metal
	natural resources such as	2.	The child will sort and count different types of	Read:
	wood and metal.		screws and metal objects.	METAL by Claire
				Llewellyn
C.	The child will identify that	1.	The child will create a sculpture with play dough	Scientific Vocabulary:
	clay is a natural resource		or clay and observe and communicate how it	<b>⇔</b> Clay
	that comes from the earth		feels, how it can change, and how it smells.	Read:
	and that he/she can	2.	The child will make patterns with play dough or	The Pot that Juan Built
	manipulate it to make		clay.	by Nancy Andrews-
	things.	3.	The child will use words to describe how	Goebel
			clay/play dough feels: soft; gooey; wet; warm;	Recipe for Baker's Clay:
			cold; soft.	4 cups of flour
		4.	The child will observe how matter can change	1 cup of salt

		form with heat by making Baker's Clay. (The child can observe that Baker's Clay can be painted)	1 ½ cups water Preheat oven to 350 degrees. Mix the flour salt, water. Knead dough as desired. Bake at 350 degrees for 1 hour.
D.	The child will identify water as a natural resource and explore the properties and changing states of water.	<ol> <li>The child will observe, predict, and infer the changes of an ice cube from solid to liquid.</li> <li>The child will investigate what happens when water is mixed with food coloring and placed in a freezer.</li> <li>The child will identify the sources of water: clouds, snow, ice, air, and water.</li> <li>The child will explore different objects noting on a graph if they can sink or float.</li> </ol>	Scientific Vocabulary:  Solid  Cliquid  Gas  Sink Float  Down Comes The Rain by Franklyn M. Branley
E.	The child will recognize that wheels affect speed and motion and make moving easier.	<ol> <li>The child will observe and discuss how certain objects and things move: train, car, wind-up toy, toy truck, roller skates, skate board, and sled.</li> <li>The child will sort different cards showing how they move.</li> <li>The child will name and list things that have wheels.</li> <li>The child will make roads and ramps in the block area to communicate how different sizes and more materials make the vehicle move slower or faster.</li> </ol>	Scientific Vocabulary:
F.	The child will explore ways objects move and forces that cause movement.	<ol> <li>The child will describe how toys move: a top – spins; a marble – rolls; a toy car is pushed; etc.</li> <li>The child will sort and classify things that roll and slide.</li> </ol>	Scientific Vocabulary"  Slide Roll Push Pull Force Read: CINNAMON'S DAY OUT by Susan L. Rothe
G.	The child will describe sounds and understand how they are made.	<ol> <li>The child will close his/her eyes predicting if the sound heard is loud or soft.</li> <li>The child will make sound patterns with common musical instruments.</li> <li>The child will look at pictures of common environmental sounds and tally if they are loud or soft.</li> </ol>	Scientific Vocabulary:  Vibration  Loud  Soft  THE LISTENING WALK  Paul Showers  SOUND EXPERIEMENTS  by Ray Broekel
Н.	The child will recognize that magnets can be used to make some objects move without being	The child will discover and record magnetic and nonmagnetic items taking a walk around the classroom.	Scientific Vocabulary:  ウ Magnet

touched	2.	The child will use one-to-one correspondence to	MICKEY'S MAGNET by
		compare the number of paper clips that can be	Franklyn M. Branley and
		picked up with different various types of	Eleanor K. Vaughan
		magnets.	

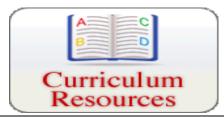


# **AGE FOUR - ARTS & MOVEMENT BENCHMARKS**

Content Standard	Performance Standard	Suggested Activities
Creative Expression Preschool programs will provide children with opportunities to exhibit curiosity about and explore how materials function and affect the senses.	The child will:  Use a variety of art materials and activities for sensory experience and exploration	Pours water, sand, or other material back and forth from one container to another Lines up a unit of blocks on the floor Puts glue on paper and sticks different materials on it Stacks Lego® blocks
Creative Expression  Preschool programs will provide children with opportunities to create (imagine, experiment. plan , make, evaluate, refine and present/exhibit) works that express or represent experiences, ideas, feelings and fantasy using various media.	The child will:  Elect to use art media Demonstrate the ability to represent experiences, thoughts and ideas using several art forms Use a variety of art media for self-expression Name and use primary and secondary colors	Creates collages Creates buildings, roads, etc. with blocks and identifies them Chooses art activity during learning center time States what it's to be constructed and demonstrate an understanding of how materials work to make representations Paints lines up and down at an easel Draws shapes and labels them (i.e., a head and four legs, a dog) Uses different colors in artwork Mixes colors to make new ones Uses yarn to add "hair" to a picture Uses paints, chalk, pencils, markers, crayons, etc. in artwork
Creative Expression  Preschool programs will provide children with opportunities to represent fantasy and real-life experiences through pretend play.	The child will:  Assume the role of someone or something else and talk in the language/tone appropriate for that person Engage in cooperative play with another	<ul> <li>Stirs pretend coffee in a cup, drinks it and says "Mmm."</li> <li>Puts phone to ear and has pretend conversations</li> <li>Plays "house" or "store" with peers</li> </ul>
Creative Expression  Preschool programs will provide children with opportunities to engage in musical and creative movement activities.	The child will:  Participate in group musical experiences, which may include listening to music, singing songs, doing finger plays and using musical instruments	Join in with peers at appropriate times during class singing of songs like "The Wheels on the Bus" or "Bingo." Uses simple percussion instruments to keep time Choreograph own dances to different kinds of music (Dance is made up of patterns.)
Aesthetic Development Preschool programs will provide children with opportunities to describe or respond to their own creative work or the creative work of others	The child will:  Use oral language to explain or describe or ask questions about a work of art  Express interest in and show appreciation for the creative work of others	Responds appropriately to questions like "Can you tell me about your picture?" and "What do you think about this picture?" Responds to the creative work of others (claps hands, moves to music, taps, etc.) Begins to create own shows

# **AGE THREE - ARTS & MOVEMENT BENCHMARKS**

Content Standard	Performance Standard	Suggested Activities
Preschool programs will provide children with opportunities to exhibit curiosity about and explore how materials function and affect the senses.	The child will:  Use a variety of art materials and activities for sensory experience and exploration	Pours water back and forth from one container to another  Moves blocks  Puts glue on paper and sticks different materials on it  Stacks Lego® blocks
Preschool programs will provide children with opportunities to create (imagine, experiment, plan, make, evaluate, refine and present/exhibit) works that express or represent experiences, ideas, feelings and fantasy using various media	The child will:  Elect to use art media Demonstrate the ability to represent experiences, thoughts and ideas using several art forms Use a variety of art media for self- expression Names some colors	Creates collages Creates buildings, roads, etc. with blocks and identifies them Chooses art activity during learning center time States what is to be constructed and demonstrates an understanding of how materials work to make representations (Uses toilet paper rolls to make binoculars) Paints lines up and down at an easel Draws shapes and labels them (i.e., a head and four legs, a dog) Uses different colors in artwork Mixes colors to make new ones Uses yarn to add "hair" to a picture with teacher assistance Uses paints, chalk, pencils, markers, crayons, etc. in artwork
Preschool programs will provide children with opportunities to represent fantasy and real-life experiences through pretend play.	The child will:  Assume the role of someone or something else and talk in the language/tone appropriate for that person  Engage in cooperative play with another	<ul> <li>Stirs pretend coffee in a cup, drinks it, and says "Mmm."</li> <li>Puts phone to ear and has pretend conversations</li> <li>Plays "house" or "store" with peers</li> </ul>
Preschool programs will provide children with opportunities to engage in musical and creative movement activities.	The child will:  Participate in group musical experiences, which may include listening to music, singing songs, doing finger plays and using musical instruments	Joins in with peers at appropriate times during class singing of songs like "The Wheels on the Bus" or "Bingo."  Uses simple percussion instruments to keep time
describe or respond to their own creative work or the creative work	The child will:  Use oral language to explain or describe or ask questions about a work of art  Express interest in and show appreciation for the creative work of others	Responds appropriately to questions like "Can you tell me about your picture?" and "What do you think about this picture?" Responds to the creative work of others (claps hands, moves to music, taps, etc.)



## **RELIGION**

#### **EXPLORING GOD'S WORLD**

Jeffers, Susan. Brother Eagle, Sister Sky. New York: Dial Books.

Wood, Douglas. 1992. Old Turtle. MN: Pfeifer Hamilton.

Johnson, James Weldon. 1993. The Creation. Boston: Little Brown and Company. Sose, Bonnie. 1988. Designed by God So I Must Be Special. Florida: Vaughn Press.

Young, Ed. 1993. Moon Mother. Willa Perlman Books.

Reid, Mary Carpenter. Come to the Ocean With Me. MN: Augsburg, Fortress.

#### **EXPLORING GOD'S FAMILY**

Munsch, Robert. 1990. Love you Forever. Canada: A Firefly Book.

Loomans, Diane. 1991. The Lovables in the Kingdom of Self-Esteem. California: H.J. Kramer Inc. Starseed Press.

Lionni, Leo. 1967. Frederick. Canada: First Pinwheel Books.

Frasier, Debra. 1991. On the Day you Were Born. California: Harcourt, Brace, Jovanovich.

Joose, Barbara. 1991. Mama, Do you Love Me? San Francisco: Chronicle Books.

Galbraith, Kathryn. 1990. Laura Charlotte. New York: Philomel Books.

Hoban, Russell. Best Friends for Frances. New York: Harper & Row.

Mayer, Mercer. Just Me and My Dad. Western Publishing Company.

Clark, Ann Nolan. In My Mother's House. New York: Penguin Books.

### **CELEBRATING GOD'S WORLD AND PEOPLE**

Nan Rolfe. 1994. Cassie's Magic Flowers: The Story of Calico Crossings. Colorado: Current Inc.

Morse, Charles and Ann. 1971. Who Body There? Minnesota, St. Mary's College Press.

Urdy, Janice May. 1961. Let's Be Enemies. New York: Scholastic Book Services.

Pfister, Marcus. 1992. The Rainbow Fish. New York: North-South Books.

#### CELEBRATING THE CATHOLIC CHURCH

Wittenback, Janet. God Makes Me His Child in Baptism. MO: Concordia Publishing

## **LANGUAGE ARTS**

## **LANGUAGE ARTS: Reading Strategies**

Carle, Eric. 1992. Draw Me a Star. New York: Philomel.

Carle, Eric. 1986. The Grouchy Ladybug. New York: Harper Collins Children's Books.

Bourgeois, Paulette. 1990. Franklin in the Dark. New York: Scholastic.

Piper, Watty. 1991. The Little Engine That Could. New York: Putnam Publishing Group

Brewster, Patience. 1982. Nobody. New York: Clarion Books.

### **LANGUAGE ARTS: Phonemic Awareness**

Ahlberg, Janet & Alan. 1986. Each Peach Pear Plum. New York: Puffin Books.

Cole J. & Calmenson S. 1990. Miss Mary Mack and other Children's Street Rhymes.

Degen, B. 1983. Jamberry. New York: Harper Collins.

Hawkins, C. Hawkins, J. 1993. Pat the Cat. New York: G.P. Putnam's Sons.

Carle, Eric. 1974. All about Arthur. New York: Franklin Watts.

Hague, K. 1984. Aphabears. New York: Henry Holt.

Base, G. 1986. Animalia. Abrams.

Cole, J. & Calmenson, S. 1993. *Six Sick Sheep: 101 Tongue Twisters*. New York: Simon & Schuster. Blevins, Wiley. 1997. *Phonemic Awareness Activities for Early Reading Success*. New York: Scholastic.

### **LANGUAGE ARTS: Phonics**

Ehlert, Lois. 1990. Color Farm. New York: Harper.

Munsch, Robert. 1992. The Button Box. New York: Dutton Children's Books.

Martin, Bill, Jr. 1991. Polar Bear, Polar Bear, What Do You Hear? NY: Henry Holt

Dale, Perry. 1988. Ten in a Bed. CA: Pleasant Hill, Discovery Toys.

Fox, Mem. 1993. *Time for Bed.* New York: Harcourt, Brace, Jovanovich.

Carle, Eric. 1987. The Very Hungry Caterpillar. New York: Scholastic.

## **LANGUAGE ARTS: Auditory Memory / Listening**

Parks, Brenda & Smith, Judith. 1989. The Enormous Watermelon. Crystal lake, IL: Rigby

Gibbons, Gail. 1991. I Know an Old Lady Who Swallowed a Fly. NY: Holiday House.

Howe, John. 1989. Jack and the Beanstalk. Boston: Little, Brown.

Little Miss Muffet. Traditional Rhyme.

Galdone, Paul. 1985. Little Red Hen. Boston: Clarion Books.

The Queen of Hearts. Traditional Rhyme.

Galdone, Paul. 1985. The Three Bears. New York: Clarion Books.

Galdone, Paul. 1988. Three Little Kittens. New York: Clarion Books.

Three Little Pigs. Traditional Tale.

## **LANGUAGE ARTS: Writing**

Banks, Kate. 1988. Alphabet Soup. New York: Alfred A. Knopf.

Martin, Bill Jr. & Archambault, John. 1989. Chicka Chicka Boom Boom. NY: Scholastic.

Lobel, Arnold. 1985. Frog and Toad are Friends. NY: Harper Collins Children's Books.

Brenner, Barbara. 1992. Group Soup. New York: Penguin Books.

Carlstrom, Nancy. 1986. Jesse Bear, What Will You Wear? New York: Macmillan.

## **SOCIAL STUDIES**

## **SOCIAL STUDIES: Psychology**

Engel, Diana. 1988. Josephina, The Great Collector. NY: Morrow Junior Books.

Heide, Florence Parry & Gilliland, Judith Heide. 1990. Illustrated by Ted Lewin. *The Day of Ahmed's Secret.* NY: Lothrop, Lee & Shepherd Books.

Lionni, Leo. 1991. Matthew's Dream. New York: The Viking Press.

Stevenson, Robert Louis. 1990. Illustrated by Ted Rand. My Shadow. New York: G.P. Putnam's Son's.

Yashima, Taro. 1955. Crow Boy. New York: The Viking Press.

Williams, Vera. Cherries and Cherry Pits. New York: William Morrow & Company.

## **SOCIAL STUDIES: Sociology**

Hoban, Russell. 1964. Illustrated by Lillian Hoban. *A Baby Sister for Francis*. New York: Harper and Row Publishers.

Hutchins, Pat. 1971. Titch. NY: Macmillan Publishing Company.

Kraus, Robert. 1970. Illustrated by Jose Aruego. *Whose Mouse Are You?* New York: Macmillan Publishing Company.

Mayer, Mercer. 1983. Me Too! New York: A Golden Book.

Murphy, Jill. 1983. Five Minutes' Peace. New York: G.P. Putnam's Sons.

Polacco, Patricia. 1989. The Keeping Quilt. New York: Simon & Schuster.

### **SOCIAL STUDIES: Conservation**

Seattle, Chief. 1991. Illustrated by Susan Jeffers. Brother Eagle, Sister Sky. New York: Dial Books.

Cherry, Lynne. 1990. The Great Kapok Tree. San Diego: Harcourt, Brace, Jovanovich.

Fife, Dale. 1991. Illustrated by Jim Arnosky. *The Empty Lot*. Boston: Little, Brown and Company & Sierra Club Books.

Peet, Bill. 1966. Farewell to Shady Glade. Boston: Houghton Mifflin.

Peet, Bill. 1970. The Wump World. Boston: Houghton Mifflin.

Ryder, Joanne. 1991. Illustrated by Catherine Stock. When The Woods Hum. New York: Morrow Junior Books.

### **SOCIAL STUDIES: Economics**

Crews, Donald. 1986. Flying. New York: Greenwillow Books.

Howard, Elizabeth Fitzgerald. 1988. The Train to Lulu's. NY: Bradbury Press.

Burningham, John. 1972. Mr. Grumpy's Motor Car. New York: Thomas Carroll.

Ross, Pat & Joel. 1981. Illustrated by Lynn Wheeling. *Your First Airplane Ride*. New York: Lothrop, Lee & Shepherd.

### **SOCIAL STUDIES: History**

Baylor, Bryd. 1986. Illustrated by Peter Parnall. *I'm in Charge of Celebrations*. New York: Charles Scribner's Son's.

Martin, Bill. 1986. Illustrated by Ted Rand. Barn Dance! NY: Henry Holt & Company.

McKissack, Patricia. 1988. Illustrated by Jerry Pinkney. Mirandy and Brother Wind. New York: Alfred A. Knopf.

Modell, Frank. 1981. One Zillion Valentines. New York: Greenwillow Books.

Polacco, Patricia. 1989. *Uncle Volva's Tree*. New York: Philomel Books.

## **SOCIAL STUDIES: Communications**

Lionni, Leo. 1967. Frederick. New York: Pantheon.

Gibbons, Gail. 1984. The Seasons of Arnold's Apple Tree. San Diego: Harcourt Brace Jovanovich Publishers, Inc.

Sendak, Maurice. 1962. Chicken Soup with Rice. New York: Harper and Row.

Rockwell, Anne. 1985. First Comes Spring. New York: Thomas Crowell.

## **SOCIAL STUDIES: Geography**

Fanelli, Sara. 1995. My Map Book. New York: Harper Collins.

Sweeney, Joan. 1996. Me on the Map. New York: Crown Publishers.

McMillan, Bruce. 1993. Mouse Views: What the Class Pet Saw. NY: Holiday House.

Alexander, Martha. 1992. Where Does the Sky End, Grandpa? San Diego: Harcourt Brace & Company.

Sneve, Virginia Hawk. 1989. Dancing Teepees. New York: Scholastic.

Swamp, Chief Seattle. 1997. Giving Thanks. New York: Scholastic.

Wood, Douglas. 1992. Old Turtle. Duluth, MN: Pfeifer-Hamilton Publishing Co.

Bruchac, Joseph & Ross, Gayle. 1995. The Story of the Milky Way. NY: Dial Books.

Swamp, Chief Seattle. 1997. Brother Eagle, Sister Sky. NY: Scholastic.

Krensky, Stephen. 1991. Children of Earth and Sky. New York: Scholastic.

Mendez, Phil. 1989. The Black Snowman. New York: Scholastic.

Ringgold, Faith. 1991. Tar Beach. New York: Scholastic.

Benjamin, Anna. 1992. Young Harriet Tubman. Troll.

Kimmel, Eric. 1996. The Magic Dreidels. New York: Scholastic.

### **MATHEMATICS**

#### **NUMBER & OPERATIONS**

Anno, Mitsumasa. 1977. Anno's Counting Book. New York: Crowell Junior.

Anno, Mitsumasa. 1982. Anno's Counting House. New York: Philomel.

Bang, Molly. 1989. Ten, Nine, Eight. Orlando, FL Harcourt Brace Jovanovich.

Carle, Eric. 1972. Rooster Off To See The World. Natick, MA. Picture Book Studio.

Carter, David, 1988. How Many Bugs in a Box? New York: Simon & Schuster.

Ehlert, Lois. 1990. Fish Eyes. Orlando, FL: Harcourt Brace Jovanovich.

McMillan, Bruce. 1986. Counting Wild Flowers. New York: Lothrop Lee and Shepard.

Thornhill, Jan. 1989. 1-2-3, A Nature Counting Book. New York: Simon and Schuster.

Trina, Rod. 1983. One Woolly Wombat. New York: Kane/Miller.

My First Calculator Book. 1991. New York: McClanahan Books.

Dalmais, Anne – Marie & Dalmais, George. 1976. *In My Garden: Learning to Count.* New York: Two Continents Publishing.

Pragoff, Fiona. 1986. How Many? From 0 to 20. New York: Doubleday.

Butler, Christina. 1988. Too Many Eggs. Boston: D.R. Godine Publishers.

Froman, Robert. 1973. Less Than Nothing is Really Something. New York: Thomas Crowell.

Walton, Rick. 1993. How Many How Many? Cambridge, MA: Candlewick Press.

Yolen, Jane. 1976. An Invitation to the Butterfly Ball. New York: Philomel.

#### **ALGEBRA**

Berger, Barbara. 1984. Grandfather Twilight. New York: Philomel Books.

Carlstrom, Nancy White. 1986. Jesse Bear, Jesse Bear, What Will You Wear? NY: Macmillan Publishing Company.

Degen, Bruce. 1983. Jamberry. NY: Harper and Row.

Martin, Bill, Jr. 1983. Brown Bear, Brown Bear, What Do You See? NY: Henry, Holt and Co.

Hurd, Edith Thacher. 1982. I Dance In My Red Pajamas. NY: Harper & Row Publishers.

#### **GEOMETRY**

Whitford, Paul & Ann. 1991. Eight Hands Round: A Patchwork Alphabet. NY: Harper Collins Publishers.

Tompert, Ann. 1990. Grandfather Tang's Story. NY: Crown Publishers.

Britton, Jill & Walter. 1992. *Teaching Tessellating Art: Activities & Transparency Masters*. Palto Alto, CA: Dale Seymour Publications.

## **MEASUREMENT**

Lionni, Leo. 1960. Linear Measurement: Inch by Inch. NY: Scholastic

Adams, Pam. 1988. Ten Beads Tall. NY: Child's Play.

Russo, Marisabina. 1986. The Line Up Book. NY: Penguin Books.

Anno, Mitsumasa,. 1990. All in a Day. NY: Putnam.

Carle, Eric. 1990. The Tiny Seed. Saxonville, MA: Picture Book Studio.

Leslie, Claire Walker. 1991. Nature All Year Long. NY: Greenwillow.

Polacco, Patricia. 1988. The Keeping Quilt. NY: Simon & Schuster.

Schulevitz, Uri. 1967. One Monday Morning. NY: Charles Scribner's Sons.

Allen, Pamela. 1990. Who Sank the Boat? North Ryde, Australia: Wm. Collins.

Pluckrose, Henry. 1988. Weight. NY: Franklin Watts.

#### **DATA ANALYSIS & PROBABILITY**

Anno, Mitsumasa & Akihiro, Nozaki. 1985. Anno's Hat Tricks. NY: Philomel Books.

Arnold, Caroline. 1984. Charts and Graphs: Fun, Facts, and Activities. NY: Franklin Watts.

Linduist, Mary with Uquire, Jane. 1992. Making Sense of Data. Reston, VA: National Teachers of Mathematics.

Russell, Susan & Stone, Antonia. 1990. *Used Numbers*: Counting Ourselves and Our Families. Palo Alto, CA: Dale Seymour Publications.

Yoshi. 1987. Who's Hiding Here? Saxonville, MA: Picture Book Studio Ltd.

Siebert, Diane. 1984. Truck Song. NY: Harper's & Row.

Crews, Donald. 1986. Ten Black Dots. NY: Greenwillow.

Lionni, Leo. 1960. Inch by Inch. NY: Astor Honor, Inc.

#### REASONING AND PROOF

Carle, Eric, 1984. The Very Hungry Caterpillar. NY: Philomel Books.

Appleby, Ellen. 1984. Three Billy Goats Gruff. A Norwegian Folktale. NY: Scholastic, Inc.

Martin, Bill, Jr. 1983. Brown Bear, Brown Bear, What Do you See? NY: Henry Holt & Company.

Carle, Eric, The Very Busy Spider. NY: Philomel Books.

Branley, Franklyn. 1986. Air is All Around You. NY: Thomas Crowell.

## **COMMUNICATION**

Martin, Bill, Jr. & Archambault, John. Here Are My Hands. NY: Henry Holt & Company.

Slobodkina, Ephyr. 1940. Caps for Sale. NY: Harper & Row.

Stinson, Kathy. 1982. Red is the Best! Toronto: Annick Press, Ltd.

### **CONNECTIONS**

Haskins, Jim. 1989. *Count Your Way Through Mexico*. Minneapolis: Carolrhoda Books, Inc. Branley, Franklyn & Vaughan, Eleanor. 1956. *Mickey's Magnet*. NY: Scholastic Book Services.

### **REPRESENTATION**

Hutchins, Pat. 1986. The Doorbell Rang. NY: Greenwillow Books.

Carle, Eric. 1981. The Very Hungry Caterpillar. NY: Philomel Books.

Kite, Patricia. 1995. Gardening Wizardry for Kids. NY: Barron's Educational Services.

Peek, Merle. 1981. Roll Over! A Counting Book. NY: Clarion Books.

Peters, Lisa Westberg. 1988. The Sun, The Wind and The Rain. NY: Henry Holt & Co.

### **SCIENCE**

### **LIFE SCIENCE**

Fox, Mem. Illustrated by Pamela Lofts. 1989. Koala Lou. San Diego: Harcourt Brace Jovanovich.

Cartwright, Ann & Reg. 1989. The Winter Hedgehog. New York: Macmillan.

Cherry, Lynne. 1990. The Great Kapok Tree. San Diego: Harcourt Brace Jovanovich.

Fife, Dale. Illustrated by Jim Arnosky. 1991. The Empty Lot. Boston: Little, Brown & Co. & Sierra Clubs Books.

Peet, Bill. 1966. Farewell to Shady Glade. Boston: Houghton Mifflin.

Ryder, Joanne. Illustrated by Catherine Stock. 1991. When the Woods Hum. NY: Morrow Junior Books.

Arnosky, Jim. 1990. Crinkleroot's Guide to Walking in Wild Places. NY: Bradbury Press

Dorros, Arthur. 1990. Rainforest Secrets. NY: Scholastic, Inc.

### **PHYSICAL SCIENCE**

Broekel, Ray. 1983. Sound Experiments. Chicago: Children's Press.

Sullivan, Tom & Kid, Ron. 1982. Common Senses. Chicago: Children's Press.

Tobias, Tobi. 1983. *The Dawdlewalk*. Minneapolis: MN: Carolrhoda.

Van der Meer, Ron & Atie. 1990. Amazing Animal Senses. Boston: Little, Brown & Co.

Aliki. 1998. My Five Senses. Big Book. Lakeshore Catalog.

Evans, David & Williams, Claudette. 1992. Let's Explore Science: Make It Go. NY: Dorling Kindersley, Inc.

Cote, Johanna. 1986. Illustrated by Bruce Degen. The Magic School Bus At The Waterworks. NY: Scholastic, Inc.

Peet, Bill. 1971. The Caboose Who Got Loose. Boston: Houghton Mifflin Company.

Borden, Louise. 1990. Illustrated Sandra Speidel. The Neighborhood Trucker. New York: Scholastic, Inc.

Burton, Virginia Lee. 1943. Katy and the Big Snow. Boston: Houghton Mifflin Co.

Flack, Marjorie. 1946. Illustrated Jay Hyde Barum. The Boats on the River. NY: Viking Press.

Scarry, Huck. 1979. Steam Train Journey. NY & Cleveland: Collins Publishers.

Branley, Franklyn & Vaughan, Eleanor K. 1986. Mickey's Magnet. NY: Scholastic, Inc.

#### **EARTH SCIENCE**

Gibbons, Gail. 1989. Catch the Wind. Boston: Little, Brown & Company.

Baylor, Byrd. 1986. Illustrated by Peter Parnall. *I'm in Charge of Celebrations*. New York: Charles Scribner's Son's.

Hort, Lenny. 1991. Illustrated by James Ransome. How Many Stars in the Sky? New York: Tambourine Books.

Arnold, Caroline. 1981. The Sky is Full of Stars. New York: Thomas Y. Crowell.

Couper, Heather & Murtagh. 1981. *Heavens Above: A Beginner's Guide to Our Universe*. New York: Franklin Watts.

Jay, Michael. 1982. The Moon. NY: Franklin Watts.

#### **HUMAN BODY**

Showers, Paul. 1982. You Can't Make a Move Without Your Muscles. NY: T.Y. Crowell.

Spohn, David. 1991. Nate's Treasure. New York: Lothrop, Lee & Shepard Books.

Arnold, Caroline. 1982. Who Keeps us Healthy? New York: Franklin Watts.

Elhert, Lois. Eating the Alphabet: Fruits and Vegetables. Lakeshore Learning Materials. Catalog. 1998.

Smaridge, Norah. 1982. What's on Your Plate? Nashville, TN: Abingdon Press.

#### **ARTS & MOVEMENT**

## **Aesthetics: Movement & Space**

Cazet, Denys. 1995. Dancing. New York: Orchard Books.

Holabird, Katherine. 1983. Angelina Ballerina. New York: Clarkson N. Potter, Inc.

Jonas, Ann. 1989. Color Dance. New York: Greenwillow Books.

Evans, Richard Paul. 1999. The Dance. New York: 17th Street Productions.

Simon, Carly. 1989. Amy The Dancing Bear. New York: Doubleday.

Johnston, Tony. Illustrated by DePaola, Tomie. 1988. Pages of Music. New York: G.P. Putnam's Sons.

Vogel, Antje. 1984. The Big Book for Little Dancers. Muenster.

Coppenrath, Verlag & Ackerman, Karen. 1989. Song and Dance Man. New York: Scholastic.

## **Aesthetics: Melody & Texture**

Sendak, Maurice. Music by Carol King. 1975. Really Rosie. New York: Harper & Row Publishers.

Ringgold, Faith. 1991. Tar Beach. New York: Crown Publishers, Inc.

Chocolate, Debbie. 1996. Kente Colors. New York: Walker & Company.

DePaola, Tomie. 1988. The Legend of Indian Paintbrush. NY: G.P. Putnam & Sons.

### **Aesthetics: Rhythm & Color**

Seuss, Dr. 1996. Many Colored Days. New York: Alfred A. Knopf.

Lionni, Leo. 1991. Matthew's Dream. New York: Alfred A. Knopf.

Carle, Eric. 1984. The Mixed-Up Chameleon. New York: Harper Trophy Book/Harper Collins Publishers.

O'Neil, Mary. 1961. Hailstones & Halibut Bones. New York: Harper & Row Publishers.

### **Aesthetics: Style, Dynamics & Tempo**

Kennedy, Jimmy. 1987. Illustrated by Theobalds, Thea. The Teddy Bear's Picnic. New York: Bedrick/Blackie.

Gauch, Patricia Lee. 1994. Tanya and Emily in a Dance for Two. New York: Putnam & Grosset Group.

Collins, Pat Lowery. 1992. I Am An Artist. Brookfield, CT: The Millbrook Press.

Chambers, Joan, Hood, Molly, and Peake, Michael. 1995. A Work of Art: Creative Activities Inspired by Famous

Artists. England: Belair Publications Limited.

Laden, Nina. 1998. When Pigasso Met Mootise. San Francisco: Chronicle Books.

Chertok, Bobbi, Hirshfeld, Goody and Rosh, Marilyn. 1996. Month-by-Month Masterpieces. New York: Scholastic Professional Books.

Chambers, Joan and Hood, Molly. 1990. Simply Artistic. England: Belair Publications LTD

#### **Aesthetics: Instrumentation**

National Museum of American Art. 1994. Celebrate America in Poetry and Art. New York: Hyperion Books.

## **Aesthetics: Sounds & Space**

Carle, Eric. 1998. Collage. Palo Alto, CA: Klutz.

Waldman, Neil. 1999. The Starry Night. Pennsylvania: Boyds Mills Press.

Carmack, Lissa Jobe. 1998. Philippe in Monet's Garden. Boston: Museum of Fine Arts.

Wildsmith, Brian. 1984. Shapes, 1, 2, 3. London: Oxford University Press. Dionetti, Michelle. 1996. Painting the Wind. Boston: Little Brown & Company. Anholt, Laurence. 1998. Picasso and The Girl With a Ponytail. New York: Barron's.

## **Aesthetics: Listening & Form**

Minnerly, Denise Bennett. 1997. Molly Meets Mona and Friends. (A magical day at the museum). New York: Greene Bark Press.

Sullivan, Charles. 1992. Numbers at Play: A Counting Book. New York: Rizzoli.

Mickethwait, Lucy. 1993. I Spy Two Eyes/Numbers in Art. New York: Mulberry Paperback Book.

Bjork, Christina. 1985. Linnea in Monet's Garden. New York: R&S Books.

Anholt, Laurence. 1994. Camille and the Sunflower. New York: Barron's.

Morrison, Megan. 1993. Long Live Earth. New York: Scholastic Books.

Mickethwait, Lucy. 1992. I Spy an Alphabet in Art. NY: Mulberry Paperback Book.

Winter, Jeannette. 1991. Diego. New York: Alfred A. Knopf.