



Mathematical
Reasoning

Language Literacy

Scientific
Reasoning

The Core Knowledge® Sequence

Content and Skill Guidelines for Preschool

2023
EDITION

Music

Visual Arts

Core Knowledge[®] Sequence

Content and Skill Guidelines for Preschool



Core Knowledge[®]



Core Knowledge®

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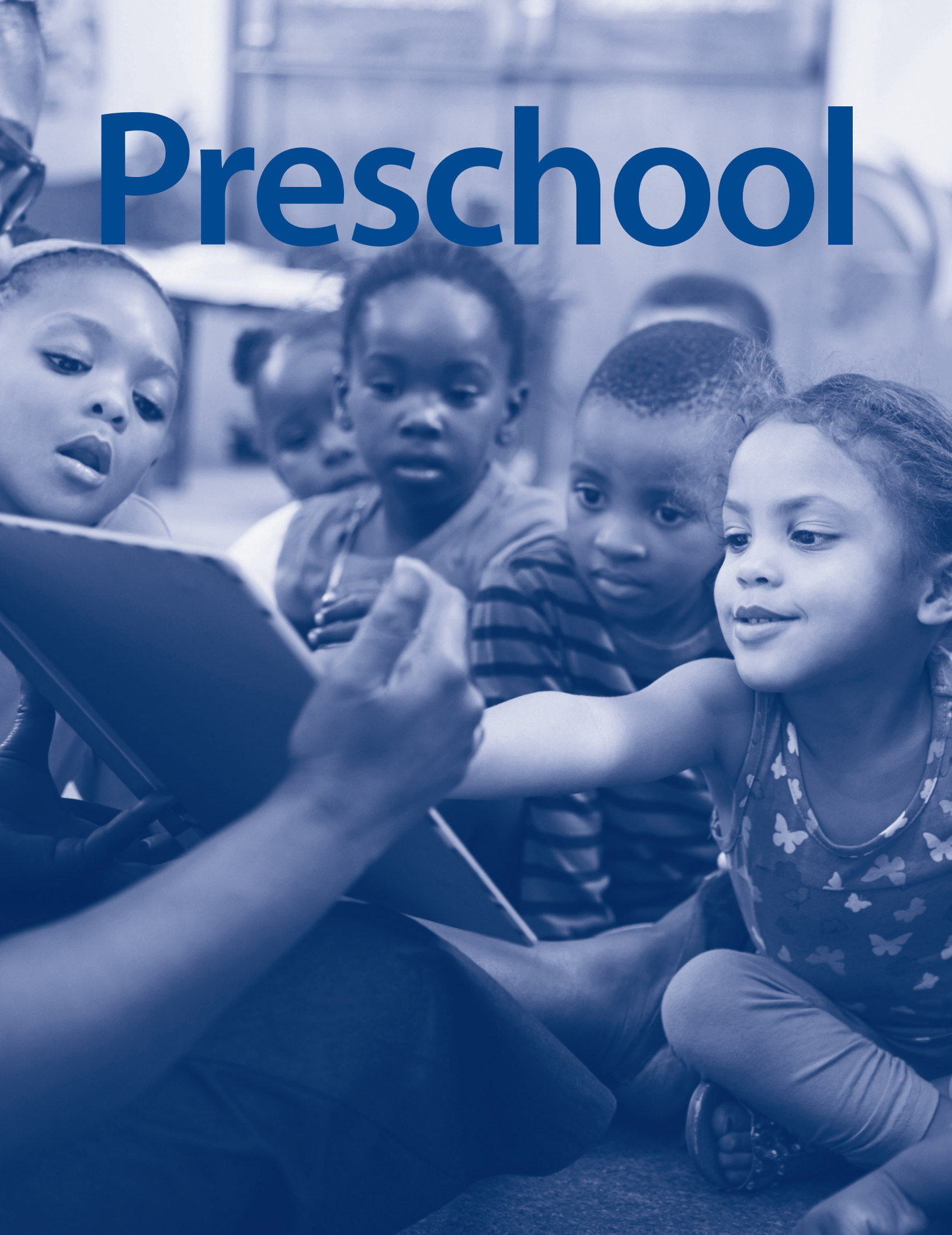
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Preschool



Overview of Topics

Preschool

The skills and knowledge in the *Core Knowledge Preschool Sequence* are designed to correlate with the *Core Knowledge Sequence* for grades K–8. The *Preschool Sequence* provides a solid, coherent foundation for the content that children will encounter in kindergarten in a school following the *Sequence* for grades K–8.

Movement and Coordination

- I. Physical Attention and Relaxation
- II. Gross Motor Skills
- III. Coordination
- IV. Group Games
- V. Using the Body Expressively

Social and Emotional Development

- I. Autonomy
- II. Social Skills
- III. Work Habits

Language and Literacy

- I. Oral Language
 - A. Functions of Language
 - B. Forms of Language
- II. Nursery Rhymes, Poems, Fingerplays and Songs
 - A. Memorization Skills
 - B. Listening
 - C. Developing a Sense of Rhyme
- III. Storybook Reading and Storytelling
 - A. Listening to Stories
 - B. Participating in Stories
 - C. Story Schema
 - D. Book and Print Awareness
- IV. Emerging Literacy Skills in Reading and Writing
 - A. Print Awareness
 - B. Print Structure
 - C. Phonemic Awareness
 - D. Fine Motor Skills

Mathematical Reasoning and Number Sense

- I. Patterns and Classification
- II. Geometry and Measurement
- III. Numbers and Number Sense
- IV. Computation
- V. Money

History and Geography

- I. Orientation in Time
 - A. Vocabulary
 - B. Measures of Time
 - C. Passage of Time (Past, Present, Future)
- II. Orientation in Space
 - A. Vocabulary
 - B. Actual and Representational Space
 - C. Simple Maps
 - D. Basic Geographic Concepts

Science: Scientific Reasoning and the Physical World

- I. Understanding the Living World
- II. Understanding the Material World
- III. Tools
- IV. Scientific Reasoning

Music

- I. Attention to Differences in Sound
- II. Imitate and Produce Sound
- III. Listen to and Sing Songs
- IV. Listen to and Move to Music

Visual Arts

- I. Attention to Visual Detail
- II. Exploration and Creation
- III. Art Appreciation

Introduction	1
Movement and Coordination	5
Social and Emotional Development: Autonomy and Social Skills	8
Social and Emotional Development: Work Habits	12
Language and Literacy	14
Oral Language	16
Nursery Rhymes, Poems, Fingerplays and Songs.....	22
Storybook Reading and Storytelling	24
Emerging Literacy Skills in Reading and Writing	27
Mathematical Reasoning and Number Sense	32
History and Geography: Orientation in Time	38
History and Geography: Orientation in Space	42
Scientific Reasoning and the Physical World	45
Music	50
Visual Arts	53

The Core Knowledge Sequence; Content and Skill Guidelines for Preschool

WHAT IS THE *CORE KNOWLEDGE PRESCHOOL SEQUENCE*?

The *Core Knowledge Sequence: Content and Skill Guidelines for Preschool (Preschool Sequence)* is a set of model guidelines describing fundamental competencies and specific knowledge that, for children from three to five years of age, can provide a solid, coherent foundation for later learning in kindergarten and beyond.

EXCELLENCE AND FAIRNESS

The *Preschool Sequence* is offered as another practical step toward the Core Knowledge Foundation's goal of promoting greater excellence and fairness in early education. Internationally, the most successful educational systems teach a core of knowledge in the early grades. Only by explicitly specifying the competencies and knowledge that all children should share can we guarantee equal access to those competencies and knowledge. In our current system, disadvantaged children especially suffer from low expectations that often translate into “waiting until they are ready” and watered-down curricula.

When expectations are made explicit, however, disadvantaged children, like all children, are exposed to a coherent core of challenging, interesting competencies and knowledge. This background not only provides a foundation for later learning, but also makes up the common ground for communication in a diverse society.

INTENDED USE OF THE *PRESCHOOL SEQUENCE*

The *Preschool Sequence* is intended to guide the planning of experiences and activities for preschool children by offering a coherent progression of skills and knowledge in the following areas:

Physical Well-Being and Motor Development

- Movement and Coordination

Social and Emotional Development

- Autonomy and Social Skills

Approaches to Learning

- Work Habits

Language and Literacy

- Oral Language
- Nursery Rhymes, Poems, Fingerplays and Songs
- Storybook Reading and Storytelling
- Emerging Literacy Skills in Reading and Writing

Knowledge Acquisition and Cognitive Development

- Mathematical Reasoning and Number Sense
- Orientation in Time and Space
- Scientific Reasoning and the Physical World
- Music
- Visual Arts

"LANGUAGE OF INSTRUCTION" IN THE *PRESCHOOL SEQUENCE*

It is almost impossible to overemphasize the significance of early language development and its impact upon nearly all other aspects of development. For this reason, the *Preschool Sequence* addresses language skills not only in the "Oral Language" chapter but throughout the *Preschool Sequence*.

Research in language development reveals that children need to hear language, specific words or vocabulary, grammatical features, and so on, before making it their own. When children hear certain words or phrases used repeatedly, they first acquire an understanding of the word or phrase; with repeated exposure in different situations, they will eventually begin using those same words and phrases in their own speech. Thus it is especially important that preschool children hear the language and vocabulary typically used in school to talk about specific subjects and content.

For this reason, The *Preschool Sequence* includes in each discipline a subsection called "Language of Instruction," which lists terms that knowledgeable and competent individuals generally use to talk about the particular subject. While not comprehensive or exhaustive, the lists provide a starting point, a suggested sampling of the precise vocabulary to which young children should be exposed.

It is important to stress that the word lists are not intended for use in isolated drill or memorization. These are not terms that the children are expected to memorize or necessarily use at this time in their own speech. At this stage, the aim for young children is exposure, that is, laying the foundation for understanding such language when it is used by others. As noted earlier, children need to hear a word used repeatedly in different situations before making it their own.

The lists are included to serve as a guide for teachers and caregivers as they interact and talk with children during the course of various activities. Such vocabulary may be incorporated in adult comments that describe what the child is doing (or, what the adult is doing, especially if he or she is modeling a behavior or approach). By using language in this way, adults demonstrate that experience can be represented symbolically by language. Furthermore, restatements in the form of questions, using the same precise vocabulary, will invite children to listen actively and begin to assimilate the language being used. More specific examples illustrating how to use the language of instruction terms in this way are included with each list.

SPECIFICITY AND READINESS

The *Core Knowledge Preschool Sequence* is distinguished by its specificity. It identifies those experiences, skills and knowledge that should be offered to all young children. Specificity is necessary as there is no evidence or guarantee that, in the course of early development, all children naturally and automatically acquire the specific knowledge and skills that provide the necessary foundation for future learning.

True, given certain minimal experiences, children naturally acquire certain rudimentary skills and knowledge. For example, barring exceptional physiological or environmental conditions, all children learn to talk. However, this initial capacity for language does not automatically, in and of itself, evolve into more sophisticated language. Acquisition of a diverse vocabulary, competence in understanding and using complex grammatical structures, as well as the ability to use language symbolically, depend heavily upon the opportunity to engage in particular language experiences.

Likewise, very young children naturally acquire certain basic math concepts, recognizing, for example, quantitative differences between groups of up to four objects. However, once again, this initial natural learning does not, on its own, evolve into more advanced competencies—for example, distinguishing and counting quantities greater than four, representing the quantities with specific number words ("four") and symbols ("4"), and so on.

Readiness is not a general, all encompassing condition that simply happens naturally in the course of a child's development. Rather, children develop and achieve different levels of readiness in different content areas, based on particular experiences. A child is ready to learn new language skills on the basis of the language experiences already encountered and the skills he or she has already mastered; he or she is ready to learn certain knowledge and skills in math on the basis of the specific mathematical knowledge and skills already possessed.

Said another way, children build new learning on what they have already learned. An important component of these learning experiences is regular interaction with competent individuals who can bridge the gap between the child's existing knowledge and skills and those toward which he or she is striving.

A specific, explicit sequence of skills and knowledge, like the *Core Knowledge Preschool Sequence*, allows teachers, parents or other caregivers to guide a young child's development in an apprentice-like fashion, taking into account a child's particular competencies so as to offer those experiences that most closely match his or her present level, while providing the stepping stones to higher levels of competence and understanding. The child's current skills and knowledge become the starting place for new experiences and instruction, rather than a limitation or restriction.

DEVELOPMENT OF THE *PRESCHOOL SEQUENCE*

The *Core Knowledge Preschool Sequence* is the result of a long process of research and critical review undertaken by the nonprofit Core Knowledge Foundation. The resulting *Preschool Sequence* represents a synthesis of exemplary practice and experience, both in the United States and abroad.

We studied the many reports that have been issued in recent years—by groups such as The Carnegie Foundation for the Advancement of Teaching, The Carnegie Corporation of New York, and The Economic and Social Research Institute—that describe the current nature of early childhood experiences for the majority of American children.

We examined important new research in cognitive development, as well as how children learn. We also examined the many documents written by professional organizations, such as the NAEYC, and government task forces at the state and national level in response to the Goals 2000 challenge to ensure that by the year 2000, all children start school ready to learn.

We looked at specific preschool practices in the United States, including well-known models of early childhood education, such as Montessori, High/Scope and Creative Curriculum, as well as programs that use an eclectic approach.

We surveyed preschool practices of several other countries, including France, Japan, Korea and Italy. The exemplary practices of the French *écoles maternelles*, publicly funded French preschools that are available to all children and have been in existence for over 100 years, were selected for in-depth study. We visited classes in order to identify the common practices and experiences offered to young children; and we examined the longitudinal research demonstrating the correlation between effective preschool experiences and their lasting, positive effects for children in all socioeconomic groups.

This wealth of information served as the basis for the development of an initial draft version of the *Preschool Sequence*. It is worth repeating that the programs and practices on which this draft was modeled have been empirically validated with millions of young children elsewhere in the world. (For detailed listings of specific references, see the "Bibliography and Resources" section.)

SPECIFICITY AND PEDAGOGY

While the *Preschool Sequence* specifies knowledge and competencies, it does not prescribe any single pedagogy or method. In particular, it is important not to confuse or equate the precision and specificity of the *Preschool Sequence* goals with an approach that relies exclusively on rote learning, isolated drill, workbooks or ditto sheets.

Children learn best by participating in meaningful activities that take into account their existing competencies. The knowledge and skills specified in the *Preschool Sequence* may best be thought of as end goals. To reach these end goals, teachers must start “where the child is,” identifying intermediate steps and activities that will, with practice over time, lead to the final goal. Often, given a child’s existing competencies, the initial and intermediate steps will appropriately focus upon activities that may be described as manipulative, hands-on, concrete activities: for example, practicing patterning skills using manipulative objects like colored beads or blocks. With appropriate guidance, these concrete, hands-on activities may be gradually transformed into more abstract, representational activities. In the patterning example above, children may next be asked to use manipulative objects to reproduce or continue a pattern represented on a design or pattern card; eventually, they move to an even more abstract level, omitting entirely the use of manipulative objects, representing and creating patterns on paper only. In sum, teachers need to use a variety of methods, strategies and materials to help children achieve the end goals described in the *Preschool Sequence*.

CRITICAL SKILLS

The skills of the *Preschool Sequence* have been differentiated into “critical skills” and “supplemental skills.” In an ideal world, in which preschool teachers had sufficient time and assistance, the teacher would evaluate all the *Preschool Sequence* objectives, i.e., both the critical and supplemental skills, on an ongoing basis for each child. However, given the present realities of most preschool classes, many of which are half-day programs, this would be an impossible task in many classrooms.

Therefore, certain skills have been designated as “critical skills.” These are the skills that are most important to assess for each child. These skills have been marked with the  icon throughout the *Preschool Sequence*. It is important to understand that, in terms of instruction, day-to-day classroom activities and experiences should still address both critical and supplemental skills. The distinction that is being made is with regard to assessment, not instruction: if time does not allow for the individual evaluation of all *Preschool Sequence* objectives, then, minimally, the critical skills should be assessed.

Movement and Coordination



Movement and Coordination

Overview: This section describes motor and coordination skills, and related movement activities that extend and refine notions of body image and the body's capabilities. It also provides opportunities for enhancing time, space and language concepts, as well as social development (when activities are carried out with others).

The basic goals ask the child to stop and start movement according to a signal; maintain balance; move through space, with or without obstacles, in a variety of ways; throw and kick objects; and move cooperatively with others. These goals are achieved through a variety of tasks or traditional childhood games. The child is also asked to use the body to interpret music and to perform pantomimes.

GOAL: REFINE PHYSICAL ATTENTION AND RELAXATION

Level I	Level II
I-MC1.1 Stop and/or start movement in response to a visual or auditory signal.	I-MC1.2 Relax specific body muscles and/or the whole body, moving from a high activity level to a quiet, focused state.

GOAL: DEVELOP AND REFINE GROSS MOTOR SKILLS

Level I	Level II
I-MC2.1 Ascend and descend steps, alternating feet.	
I-MC2.2 Maintain balance while changing body position without moving through space.	
I-MC2.3a Maintain balance while walking forward on a wide bench or beam.	II-MC2.3b Maintain balance while walking forward, backwards and sideways on a balance beam, 10" wide or less.
I-MC2.4 Situate oneself within a space of defined boundaries, modifying body configuration and size to fit the space.	
I-MC2.5a Move through space with or without obstacles—avoiding touching or bumping other individuals or obstacles—by crawling, walking, running, galloping, hopping (same foot and alternate foot) or jumping.	II-MC2.5b Move through space using various movements (e.g., ascending and descending, climbing, rolling, jumping, sliding, crawling, somersaulting, jumping) to surmount obstacles.
	II-MC2.6 Move through space by completing a circuit or obstacle course, following arrows or the path indicated.



GOAL: DEVELOP AND REFINE EYE-HAND AND EYE-FOOT COORDINATION SKILLS

Level I	Level II
I-MC3.1a Throw or kick an object in the direction indicated.	II-MC3.1b Throw or kick an object with increasing accuracy at identified targets varying in height and distance.
I-MC3.2a Play catch with a bean bag, with a partner seated or standing 1.5 feet apart.	II-MC3.2b Play catch using a large ball, with a partner seated or standing 2.5 feet apart.
	II-MC3.3 Ride a tricycle.
	II-MC3.4 Maintain momentum on a swing by pumping legs.
I-MC3.5 Coordinate motor activity to carry out a goal with a partner or group.	

GOAL: PLAY GROUP GAMES

Level I	Level II
I-MC4.1a Play group games such as Farmer in the Dell, Follow the Leader, Hot Potato, London Bridge, Mother May I?, Ring Around the Rosie, Simon Says.	II-MC4.1b Play group games such as Duck, Duck, Goose; Drop the Handkerchief; Kitty Wants a Corner; Musical Chairs; Red Light-Green Light; Relay Race; Tag.

GOAL: USE THE BODY EXPRESSIVELY

Level I	Level II
I-MC5.1 Imitate the position or action of another person.	
I-MC5.2 Act out a simple pantomime.	
	II-MC5.3 Act out a nursery rhyme, poem or fingerplay.

LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
catch	quiet	act out	rules
climb	run	aim	sideways
dance	slow	backward	signal
fast	soft	balance	slide
jump	start	crawl	somersault
kick	stop	forward	speed
loud	throw	gallop	still
move	walk	hop	suspend
		imitate	target
		incline	tricycle
		interpret	pantomime
		ladder	play catch
		moving	pump legs
		obstacle	relax
		obstacle course	relay race
			roll

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Also: See Language of Instruction for Orientation in Space (positional words) and Autonomy and Social Skills (body image vocabulary).

Example: Use vocabulary from the Movement and Coordination section as follows:

Adult: I want to see how many different ways you can *move* down this (pointing) *incline*.

Who can show me one way to move down the *incline*?

Child rolls down incline

Adult: Good—you can *roll sideways* down the *incline*. What’s another way?

Child crawls down incline

Adult: Right—you can *crawl* down the *incline* on your hands and knees, etc.

Social and Emotional Development: Autonomy and Social Skills



Social and Emotional Development: Autonomy and Social Skills

Overview: The basic goals associated with this section focus on the development of those emotional and social skills that enable the young child to function independently within the social setting of the class group. These include developing a sense of who he or she is and his or her capacities, beginning with a sense of physical body image. The child will also learn those interpersonal, social skills essential to interacting with others, such as the “give and take” of being part of a group and the need to sometimes delay or defer his or her own immediate desires, given the demands of the group. These goals mark the beginning development of an individual who is independent and competent, able to assume responsibility for his or her actions within the context of the group.

GOAL: ESTABLISH A SENSE OF AUTONOMY: SELF AND PERSONAL RESPONSIBILITY

Level I	Level II
I-AS1.1 Recognize and respond to own first and last name, orally and in writing.	
I-AS1.2 Orally provide first name and last name.	
Internalize and conceptualize an image of one's body	
I-AS2.1  Name parts of the body: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, nose, stomach, toe.	
I-AS2.2a  Draw a simple line drawing (stick figure) of a person, such as a stick figure that includes a head (with eyes, nose, mouth), body, arms and legs.	II-AS2.2b  Draw a dimensional picture of a person that includes a head (with eyes, eyebrows, nose, mouth, hair), neck, body, arms (with hands) and legs (with feet).
Care for personal needs	
I-AS3.1a  Practice good hygiene (use bathroom independently, wash hands, etc.), use appropriate table manners (feed self using fork, spoon and knife; appropriate use of napkin), put on clothing, etc.	II-AS3.1b Care for personal needs by dressing self independently (fastening clothing, using buttons and zippers).
Express one's feelings	
	II-AS4.1 Identify and label the following emotions: happy, sad, angry, afraid, frustrated, confused.
	II-AS4.2  Use acceptable methods of expressing anger.

GOAL: FUNCTION AND WORK CONSTRUCTIVELY IN A GROUP SETTING USING APPROPRIATE SOCIAL SKILLS

Level I	Level II
Communicate with others	
I-AS5.1a  Recognize and call classmates and teacher by name.	II-AS5.1b Recognize, call by name and indicate role of school personnel.
I-AS5.2  Greet adults as "Mr. (name)," "Ms. (name)" or "Mrs. (name)."	
I-AS5.3 Acknowledge and return greetings and farewells.	
I-AS5.4  Make requests and acknowledge attempts to meet requests politely.	
	II-AS5.5  Ask appropriately for help of an adult when needed.
I-AS5.6 Attend and listen while others speak during a group activity.	
	II-AS5.7  Interrupt a conversation between two people politely.
I-AS5.8  Wait turn to speak in a group.	
	II-AS5.9  Demonstrate observable listening behaviors.
Cooperates with others	
	II-AS6.1  Identify and follow classroom rules.
	II-AS6.2  Offer assistance to another child.
I-AS6.3a  Carry out chores and responsibilities that contribute to the well-being and functioning of the group.	II-AS6.3b Carry out certain chores that contribute to the well-being and functioning of the group.
I-AS6.4  Sit among other children during a group activity, remaining in own physical space.	
	II-AS6.5 Respect the personal belongings and property of others.
	II-AS6.6  Take turns using toys and sharing materials.
I-AS6.7  With advance notice, stop when told and change activities, moving cooperatively to another activity.	



GOAL: FUNCTION AND WORK CONSTRUCTIVELY IN A GROUP SETTING USING APPROPRIATE SOCIAL SKILLS

Level I	Level II
I-AS6.8a Follow rules for simple childhood games.	II-AS6.8b Follow rules for simple childhood games (board games and group circle games).
	II-AS6.9 Ignore inappropriate peer behavior.
	II-AS6.10 Accept consequences of actions.
	II-AS6.11 Attempt to solve problems or conflicts using words.
	II-AS6.12 Complete an activity or project in conjunction with another child or small group.

LANGUAGE OF INSTRUCTION

Teacher and Children	Teacher Only
Body Parts ankle arm back body cheek chest chin ear elbow eye eyebrow eyelash face feet finger forehead foot hair hand head heel hip knee leg lip mouth	Body Parts part(s) Social Skills apologize interrupt

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Also: See “Language of Instruction” for Orientation in Space (positional words) and Autonomy and Social Skills (body image vocabulary).

Example: Use vocabulary from the Autonomy and Social Skills section as follows:

Child: I made a picture.

Adult: Let’s see. What can you tell me about your picture?

Child: It’s me.

Adult: Ahh, you drew a picture of yourself. Can you tell me about the different *parts* of the drawing—the different *parts* of the body; what is this (points to *head*)?

Child: The *head*.

Adult: You drew a picture of a *head*. And where is your *head*? Point to your *head*. That’s right. Now tell me about the different parts of the *head* you drew. Where are the *eyebrows*? Are these the *eyebrows*?

Social and Emotional Development: Work Habits



Social and Emotional Development: Work Habits

Overview: The foundation for the manner in which children will later approach academic work in kindergarten and beyond is established, step by step, through the experiences and expectations that children encounter in play and activities at the preschool level. This section focuses on gently guiding children to develop a methodology for approaching different activities, to develop memory skills, follow directions, persist at a task, identify the materials and steps needed to carry out an activity, evaluate and correct their own work, and so on.

GOAL: DEVELOP MEMORIZATION SKILLS

Level I

Level II

II-AS7.1 Memorize address, phone number and date of birth.

GOAL: DEVELOP INDEPENDENT WORK HABITS

Level I

Level II

I-AS8.1a Carry out single-step oral directions.



II-AS8.1b Carry out multi-step oral directions that have been accompanied by preliminary demonstration.



I-AS8.2a Choose and use a toy or do an activity independently for a sustained period of time (at least ten minutes).

II-AS8.2b Choose and use a toy or do an activity independently for a sustained period of time (at least 20 minutes).

I-AS8.3 Return toys and materials to their proper location after use.

I-AS8.4 Work in an orderly, persistent fashion in completing a task, even if difficulty is encountered.

II-AS8.5 Organize and plan what is needed to carry out a project or task (with adult assistance as needed).

II-AS8.6 Describe and evaluate one's own work, identify and correct errors, refine work, with the assistance and feedback of an adult, when needed.

LANGUAGE OF INSTRUCTION

Teacher and Children

Teacher Only

Independent Work Habits

correct
effort
error
follow directions
independently
materials
mistake

persevere
responsibility
tools

Memorization

attention
concentrate
memorize
remember

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Work Habits section as follows:

Child: Uh oh! The milk spilled. It’s a big mess.

Adult: Oops, there was an accident and the milk spilled. That’s okay—sometimes accidents happen. Sometimes we make *mistakes*—everyone does. But now there is a mess. Let’s see—what do we need to do with the mess? What do we need to do to fix or *correct* what happened?

Child: Clean it up.

Adult: That’s right. And when we make a mess or spill something, it’s our *responsibility* to clean it up—that means that it’s our job to clean it up. I’ll help you by getting the sponge for you and then you can be *responsible* for wiping up the milk (hands child the sponge). Do you know how to wipe up the milk or should I show you how to get started?

Language and Literacy

INTRODUCTION



It is almost impossible to overemphasize the significance of early language development and its impact upon nearly every aspect of future development. We live in a culture in which, in a very real sense, an individual's ability to "use language" is synonymous with the ability to think. Words and the way that they may be linked together in sentences to express and relate ideas provide the lens or filters through which we perceive, understand and analyze our world and experiences.

In identifying competencies that fall under the general category of language, it is useful to consider several different dimensions of language—the function versus the form of language; receptive vs. expressive language; and oral vs. written language.

Certain language skills fall under the function category, addressing the various purposes or ways in which language is used.

Language may be used as a form of discourse, a means of personal and interpersonal communication. Subcategories can be further identified:

- **Conversing**—carrying on a simple conversation
- **Asserting State of Being, Needs and Desires**—describing physical sensations, mental states or emotional feelings, "I want ..." or "I need ...," etc.
- **Narrating**—describing an object, person, event or experience
- **Explaining/Directing**—giving directions or instructions, often step by step
- **Expressing a Point of View/Imagining**—giving an opinion, pretending and assuming the role or perspective of another, making up a story

In addition, language may be used to symbolically represent concrete objects and actual experiences in order to organize, relate and analyze information—in short, for thinking.

Several subcategories include:

- **Predicting**—anticipating and saying what is likely to happen next
- **Relating Concepts/Thinking Logically**—giving opposites, sorting and classifying, relating cause and effect

Other language skills associated with the form of language are those that address the structure or the nuts and bolts of language. In addition to mastering the sounds and pronunciation of words, a skill that most young children will have accomplished in the early toddler years, preschoolers must also build:

- **Vocabulary**—acquiring increasingly precise and varied ways to express nuances of meaning
- **Syntax**—learning the grammar of language word order in a sentence; word endings to reflect singular and plural, past and present; and specific ways of connecting words and phrases that indicate different relationships, e.g., cause-effect, temporal, etc.

In addition, language may be characterized as receptive language (comprehension), or expressive language (production). Development does not necessarily proceed at a parallel pace between these two language dimensions. Generally, receptive language precedes expressive language. Said another way, children need to understand and comprehend language before being expected to produce language; for example, children need many opportunities to listen to narrative descriptions (in adult commentary, story books and so on) before they can be expected to produce narrative descriptions themselves.

Finally, language may be described as oral (spoken) language or written language, symbolically represented by various combinations of the letters of the alphabet in the form of written words and sentences. In terms of language development, the primary focus during the preschool years is, of course, on oral language development; however, it is also important to recognize that, given appropriate experiences, the initial foundation for written language development is also put into place at this time.

The four segments of the *Preschool Sequence* that follow address each of these language dimensions. While conceptually organized in four separate sections, Oral Language; Nursery Rhymes, Poems, Fingerplays and Songs; Storybook Reading and Storytelling; and Emerging Literacy Skills in Reading and Writing, the language skills in each section are closely interrelated, building upon and reinforcing the competencies found in the other sections.

To aid teachers and caregivers in seeing these interrelationships in language skills, the competencies in each section have been cross-referenced according to the various subcategories listed in this introduction.



Oral Language

Overview: The basic goals in this section focus on understanding and using spoken language through the development of basic conversational skills, as well as more complex discourse skills: clearly communicating one's needs; understanding or giving a verbal description of a person, object or experience; sequencing the events of a particular experience in chronological order; giving directions or explaining how to do something; offering a personal opinion; using pretend language; and so on. Children benefit from many experiences and opportunities to listen and talk in a variety of circumstances, moving from using language in strictly contextualized situations, referring to objects or events present in the immediate environment, to use decontextualized language, moving beyond the here and now. Language can then be used symbolically—to talk about the past, answer “what if” questions, link cause and effect, as well as to conceptually sort and classify. Additional goals in this section address mastering the form of oral language, both vocabulary and syntax.

While it is beyond the intended purpose of the *Preschool Sequence* to provide suggestions and activities on how to teach the listed competencies, it is particularly important in this section on oral language to emphasize the teaching of these skills within the context of learning opportunities, in the form of child-adult interactions and conversations, that present themselves continuously on a daily basis. The manner in which adults respond to children's utterances and subsequent opportunities offered for additional conversation and talk clearly influence children's language development.

Language research suggests that children benefit from:

- Frequent language interaction, with many opportunities to listen and talk
- Adult models of high quality talk that keep in mind children's need to first hear many “language examples” in order to build a receptive language base: use of a variety of vocabulary, including occasional “rare words” (multi-syllable words that might normally be considered “outside a preschooler's vocabulary”); use of a variety of syntactical forms such as complex sentences that relate ideas; talk that is informative and illustrates reflection and problem solving; etc.
- Adult responses that reflect and incorporate what the child has said but also expand upon his or her comments
- Adult comments and behaviors that invite further conversation on the child's part: a question, a pause (after a question, allowing several seconds of quiet time for the child to process the question), a rise in intonation of the voice, a facial expression (a glance in his or her direction, raising the eyebrows expectantly)
- Rephrasing of questions, in the absence of a response by the child, in a manner that gives hints about how to respond, moving from open-ended questions to those that offer a structured choice: “Where is the pirate going?” (no answer) “Is he going to look for the buried treasure or is he going to chase the other pirate boat?”
- Opportunities and invitations to use language in decontextualized settings—to talk about objects, events or experiences that are not part of the immediate environment:
 - “What did you do at grandma's house?”
 - “How did you make the pinwheel?”
 - “What are you going to do when you go on vacation?”
- Minimal use of directives (“Do this ...,” “Don't do this ...,” etc.)

I. FUNCTION

GOAL: UNDERSTAND AND USE NONVERBAL FEATURES OF COMMUNICATION

Level I	Level II
I-OL1.1a Adapt the volume of one's voice to different settings and different purposes.	II-OL1.1b Understand and use intonation and emphasis to ask a question or express surprise, agreement, displeasure or urgency.

GOAL: UNDERSTAND AND USE LANGUAGE TO COMMUNICATE

Level I	Level II
Conversing	
I-OL2.1a  Carry on a dialogue or conversation with an adult, initiating comments or responding to partner's comments.	II-OL2.1b  Carry on a dialogue or conversation with a child of approximately the same age, initiating comments or responding to partner's comments.
I-OL2.2a Answer the telephone appropriately.	II-OL2.2b Carry on a simple conversation on the telephone.

Assert state of being, needs and desires

I-OL3.1  Express personal needs and desires verbally in a comprehensible manner.	II-OL3.2  Identify and express physical sensations, mental states and emotional feelings (happy, sad, angry, afraid, frustrated, confused).
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Narrate

I-OL4.1 Given a picture, individual object or person within view, indicate the object, person or picture that has been designated.	
I-OL4.2 Given a picture, individual object or person within view, describe the attributes of the object, person or picture so that someone else may identify it.	
I-OL4.3a  Sequence and describe three images of events or phases of a single event that have been experienced, occurring at temporally distinct times of the day.	II-OL4.3b  Sequence and describe three to five images of events or phases of a single event that have been experienced.
I-OL4.4a Describe an event or task that one is in the process of completing.	II-OL4.4b Describe an event or task that has already taken place outside the immediate place and time.
I-OL4.5a Describe an event or task that one has just experienced in the immediate past.	II-OL4.5b Describe an event or task that will take place.

Explain/direct

I-OL5.1a Give simple, single-step directions.	II-OL5.1b Give simple, multi-step directions.
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GOAL: UNDERSTAND AND USE LANGUAGE TO COMMUNICATE

Level I

Level II

Express a point of view and imagine

II-OL6.1 Express a personal opinion.

II-OL6.2 Assume a different role or perspective and express different possibilities, imaginary or realistic.

GOAL: UNDERSTAND AND USE LANGUAGE TO THINK: ORGANIZE, RELATE AND ANALYZE INFORMATION

Level I

Level II

Predict

I-OL7.1 Answer "what will happen if..." questions.

II-OL7.2 Identify outcomes and possible causes.



Relate concepts and reason logically

I-OL8.1a Pair pictures depicting opposites: big-little, cold-hot, dry-wet, full-empty, happy-sad, open-close.



II-OL8.1b Name opposites: big-little, cold-hot, dry-wet, fast-slow, rough-smooth, full-empty, hard-soft, large-small, loud-quiet, on-off, open-close, tall-short, yes-no.



II. FORM

GOAL: UNDERSTAND AND USE INCREASINGLY VARIED AND COMPLEX VOCABULARY AND SYNTAX

Level I

Level II

I-OL9.1a Point to/understand increasingly precise nouns related to the home, family and food.



II-OL9.1b Point to/understand precise nouns related to the home, family, food, clothing, school, town/city, transportation and stores/services.



I-OL9.2a Use increasingly precise nouns related to the home, family and food.



II-OL9.2b Use increasingly precise nouns related to the home, family, food, clothing, school, town/city, transportation and stores/services.



I-OL9.3a Point to body parts: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, stomach, toe.



II-OL9.3b Point to body parts: ankle, arm, back, body, chest, cheek, chin, ear, elbow, eye, eyebrow, eyelash, face, finger, foot, forehead, hair, hand, heel, hip, knee, leg, lips, mouth, nail, neck, nose, shoulder, teeth, toe, tongue, waist, wrist.



I-OL9.4a Name body parts: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, nose, stomach, toe.



II-OL9.4b Name body parts: ankle, arm, back, body, chest, cheek, chin, ear, elbow, eye, eyebrow, eyelash, face, finger, foot, forehead, hair, hand, heel, hip, knee, leg, lips, mouth, nail, neck, nose, shoulder, teeth, toe, tongue, waist, wrist.



GOAL: UNDERSTAND AND USE INCREASINGLY VARIED AND COMPLEX VOCABULARY AND SYNTAX

Level I		Level II	
I-OL9.5a	Understand increasingly precise verbs related to the five senses.	II-OL9.5b	Understand increasingly precise verbs related to eating, movement and the five senses.
I-OL9.6a	Use increasingly precise verbs related to the five senses.	II-OL9.6b	Use increasingly precise verbs related to eating, movement and the five senses.
I-OL9.7	Point to colors: black, blue, brown, green, orange, purple, red, white, yellow.		
I-OL9.8	Name colors: black, blue, brown, green, orange, purple, red, white, yellow.		
I-OL9.9a	Point to shapes: circle, square, triangle.	II-OL9.9b	Point to shapes: circle, square, triangle, rectangle.
I-OL9.10a	Name shapes: circle, square, triangle.	II-OL9.10b	Name shapes: circle, square, triangle, rectangle.
I-OL9.11a	Point to: more-less (fewer), one-four.	II-OL9.11b	Point to: any-some, all-none, more-less (fewer), most-least, many-few, equal, one-ten.
I-OL9.12a	Use quantity words: more-less (fewer), one-four.	II-OL9.12b	Use quantity words: any-some, all-none, more-less (fewer), most-least, many-few, equal, one-ten.
I-OL9.13	Point to sensory attributes: sweet-salty, loud-quiet, hard-soft, rough-smooth, hot-cold, wet-dry.		
I-OL9.14	Use sensory attributes: sweet-salty, loud-quiet, hard-soft, rough-smooth, hot-cold, wet-dry.		
		II-OL9.15	Understand increasingly precise vocabulary (adjectives-describing words).
I-OL9.16a	Demonstrate understanding of temporal words: today, before-after, now, first-last, day-night, current day, week.	II-OL9.16b	Demonstrate understanding of temporal words: today-tomorrow-yesterday, always-never-sometimes, before-after, now-immediate, first-last, beginning-middle-end, then-next, already, soon.
I-OL9.17a	Use temporal words: today, before-after, now, first-last, day-night, current day, week.	II-OL9.17b	Use temporal words: today-tomorrow-yesterday, always-never-sometimes, before-after, now-immediate, first-last, beginning-middle-end, then-next, already, soon.
I-OL9.18a	Demonstrate understanding of spatial words: in-out, in front of-behind, at the top of-at the bottom of, under-over, in a line/row, up-down.	II-OL9.18b	Show understanding of spatial words: there-here, in-on, in front of-behind, at the top of-at the bottom of, under-over, above-below, next to-in the middle of, near-far, inside-outside, around-between, up-down, high-low, left-right, front-back.
I-OL9.19a	Use spatial words: in-out, in front of-behind, at the top of-at the bottom of, under-over, in a line/row, up-down.	II-OL9.19b	Use spatial words: there-here, in-on, in front of-behind, at the top of-at the bottom of, under-over, above-below, next to-in the middle of, near-far, inside-outside, around-between, up-down, high-low, left-right, front-back.
I-OL9.20a	Use present and past verb tense.	II-OL9.20b	Use the future verb tense.

GOAL: UNDERSTAND AND USE INCREASINGLY VARIED AND COMPLEX VOCABULARY AND SYNTAX

Level I	Level II
I-OL9.21 Understand and use increasingly detailed, elaborated declarative sentences.	II-OL9.22 Understand and use complex sentences with clauses introduced by: because, if, as soon as, so that, while, before, after, who, that, when, (verb)+ing.
I-OL9.23 Ask or answer questions beginning with: who, what, where, when, why.	
I-OL9.24 Ask or answer increasingly detailed, elaborated questions (other than those beginning with who, what, where, when, why).	
I-OL9.25 Understand and use increasingly detailed, elaborated imperatives	
I-OL9.26 Understand and use the negative forms of declarative sentences, questions and imperatives.	
I-OL9.27a Combine simple sentences using "and."	II-OL9.27b Combine simple sentences using "but" or "or."
I-OL9.28 Use personal pronouns correctly, especially "I" when referring to oneself.	
	II-OL9.29 Describe oneself, home and immediate family.
	II-OL9.30 Point to: large-small, wide-narrow, big-little, full-empty, tall-short, heavy-light, long-short, thick-thin.
	II-OL9.31 Use size words: large-small, wide-narrow, big-little, full-empty, tall-short, heavy-light, long-short, thick-thin.
	II-OL9.32 After listening to an oral description of a scene, recreate the scene in pictures.
	II-OL9.33 Give a detailed, sequential explanation of how to do something so that the activity can be carried out by another person.
	II-OL9.34 Understand adverbs, i.e., describing words.
	II-OL9.35 Use adverbs, i.e., describing words: quickly, slowly, gently, softly, nicely.

LANGUAGE OF INSTRUCTION

Teacher and Children	Teacher Only	
	category	loud
	conversation	opposite
	describe	question
	directions	quiet
	explain	talk
	group	whisper
	in order	yell

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Also: Specific vocabulary for Teacher and Children is listed separately within other sections of the *Preschool Sequence*, such as Autonomy and Social Skills, Work Habits, Mathematical Reasoning and Number Sense, Orientation in Space and so on.

Example: Use vocabulary from the Oral Language section as follows:

Adult: Here are some pictures of different things. See—here’s a picture of an apple, an ice cream cone, a dress, a cookie, a pair of shoes, a jacket, a pair of pants and a hamburger. Some of these pictures “go together.” They belong to the same *group* of things; they belong to the same *category*. See—I can put the apple, the ice cream cone and the cookie all together in a *group*: they are all things that we can eat; they belong to the food *category*. Do you see another picture that belongs to the food *category*?

Child: (points to picture of the hamburger)

Adult: That’s right—we can eat an apple, an ice cream cone, a cookie or a ...? (points to picture of hamburger and pauses expectantly)

Child: Hamburger.

Adult: (nods) ...So they all belong to the food *category*. Here are some other pictures that belong to another *group* or *category*.



Nursery Rhymes, Poems, Fingerplays and Songs

Overview: The goals in this section introduce young children to nursery rhymes, poems, fingerplays and songs—listening to and keeping the beat, listening to and interpreting the simple words of a given selection with gestures and actions, as well as learning about rhyming words. In addition to the sheer enjoyment of listening to and repeating the rhythmic and musical combination of words, learning these selections provides skill and discipline in developing the ability to memorize and further extends children’s understanding and use of both the form and function of language.

By listening to and reciting these poems and songs, children have an opportunity to model and practice various oral language skills, including pronunciation, vocabulary and syntax. They can then build upon their familiarity with certain well known rhymes by experimenting with rhyming words. This competency, in turn, focuses attention on the sounds of language, a skill that will enhance later efforts in initial reading.

In addition to providing experiences with the form of language, these selections introduce children to hearing some more formal written language. The language of the “little stories” of these poems and songs differs from contextualized language of daily conversations. Their brevity makes them an ideal transition to the narrative language of storybooks.

GOAL: DEVELOP MEMORIZATION SKILLS

Level I	Level II
I-NR1.1a  Memorize and recite with others a simple nursery rhyme, poem or song	II-NR1.1b Memorize and recite independently a simple nursery rhyme, poem or song.

GOAL: LISTEN TO NURSERY RHYMES, POEMS, FINGERPLAYS AND SONGS AND RESPOND WITH APPROPRIATE GESTURES

Level I	Level II
I-NR2.1  With hands and/or feet, clap or tap the beat of a familiar rhyme, poem or finger play.	
I-NR2.2a  Perform previously taught hand and body gestures associated with a familiar rhyme, poem or fingerplay.	II-NR2.2b Interpret and act out through pantomime a nursery rhyme, poem or fingerplay using one’s own original gestures and movements.

GOAL: DEVELOP A SENSE OF RHYME

Level I	Level II
	II-NR3.1 Using familiar rhymes, poems or songs, finish a recitation that has begun with the correct rhyming word.
	II-NR3.2 Using familiar rhymes, poems or songs, indicate several possible rhyming words (other than those included in the actual rhyme) to finish the recitation.

LANGUAGE OF INSTRUCTION

Teacher and Children	Teacher Only
	author
	beat
	clap
	echo
	fingerplay
	pantomime
	poem
	recite
	refrain
	repeat
	rhyme
	rhyming word
	song
	tap
	title
	verse

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the *Nursery Rhymes, Poems, Fingerplays and Songs* section as follows:

Adult: Listen to this nursery *rhyme* while I recite it—it has *rhyming words*:

To market, to market, to buy a fat pig (emphasis on pig)
Home again, home again, jiggety-jig. (emphasis on jig).

Pig and jig are *rhyming words*. Try to say or echo the *rhyming words* with me:

To market, to market, to buy a fat (pause—child and adult together): p...ig
Home again, home again, jiggety (pause—child and adult together): j...ig.

Did you hear the two *rhyming words*? pig and ...

Child: jig.

Adult: That’s right—pig and jig are *rhyming words*. Now listen while I *recite* another *verse*—there are some other *rhyming words*:

To market, to market, to buy a fat hog (emphasis on hog)
Home again, home again, jiggety-jog. (emphasis on jog), etc.



Storybook Reading and Storytelling

Overview: The goals of this section focus on the language skills that children acquire when given the opportunity to hear the language of storybooks. In listening to and talking about stories that are read aloud, children build both listening and speaking skills. They are introduced to new vocabulary and formal written syntax, ways of linking and relating ideas. They also refine skills in:

- **Narrating:** understanding and describing illustrations, understanding and describing the setting, characters and events of stories and so on
- **Predicting:** telling what will happen next in a story or suggesting a possible alternative ending
- **Imagining:** telling their own stories, either based on illustrations or creating a story using their imagination.

In addition, early experiences with books also lay the foundation for concepts and skills that children will later use as they begin to read and write. They learn about book format—the arrangement of covers, pages, individual printed words and letters—and they gain insight into the elements of a story—setting, characters, the pursuit of a goal or the resolution of a problem in a sequential series of events—an understanding that is instrumental for reading comprehension.

GOAL: LISTEN TO STORIES READ ALOUD

Level I		Level II	
I-SR1.1a	Attend and listen to illustrated picture books with simple story lines.	II-SR1.1b	Attend and listen to picture books with story lines (30 minutes), as well as books of other genres, such as nonfiction (15 minutes).
I-SR1.2	Hold a book correctly, turning the pages in accordance with the story being read aloud, from beginning to end.		
I-SR1.3	Find the illustration, or object within the illustration of a book, that is being described.		
I-SR1.4a	Answer who, what and where questions about a read-aloud.	II-SR1.4b	Answer who, what, where, when and why questions about a read-aloud.

GOAL: PARTICIPATE IN STORIES READ ALOUD

Level I		Level II	
I-SR2.1	Describe an illustration.		
I-SR2.2	Provide or join in repeating the refrain in books with repetitive phrases.		

GOAL: DEVELOP A NOTION OF "STORY SCHEMA"

Level I	Level II
I-SR3.1a  "Retell" a story that has been read aloud, including characters, a beginning and an ending.	II-SR3.1b  "Retell" a story that has been read aloud, including character(s), setting (time, place), the plot (central idea) of the story, the sequence of events and an ending.
I-SR3.2a  Sequence illustrations of three story events.	II-SR3.2b  Sequence illustrations of three to five story events.
I-SR3.3a "Read"/tell a story using a wordless picture book.	II-SR3.3b  "Read"/tell a story based on the illustrations of a book with text that has not been read aloud previously.

GOAL: DEMONSTRATE AN AWARENESS OF BOOK AND PRINT (WRITTEN LANGUAGE) ORGANIZATION

Level I	Level II
I-SR4.1 Identify previously read books by the title and cover.	II-SR4.2 Attend and listen to books with minimal or no illustrations (15 minutes).
	II-SR4.3  Predict events in a story, i.e., what will happen next.
	II-SR4.4 Provide a story ending consistent with other given story events.
	II-SR4.5 Make up and tell a story.
	II-SR4.6  Point to the title of a book; the top, middle, or bottom of a page; the beginning of a book; where to start reading a book; the order that words are read on a page; the end of a book; a word; and a letter.
	II-SR4.7 Use cover and illustration cues to locate those books that pertain to a particular topic or might answer a topical question.
	II-SR4.8 Point to words that begin with the same letter as own first name.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
after	middle	at last	letter
bottom	next	author	page
end	once upon a time	beginning	read
first	top	character	refrain
finally	then	cover	retell
		events	title
		illustration	write
		illustrator	word
		in order	

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Storybook Reading and Storytelling section as follows:

Adult: Do you remember that yesterday we *read* the story, *The Red Balloon*? Today, we are going to look at the *illustrations* in *The Red Balloon*, the pictures. I want you to *retell* the story of *The Red Balloon*. We’ll look at each *illustration in order* and you’ll tell me what was happening in the story. Here’s the first *illustration*—tell me about the *characters*—who you see in the picture—and what was happening.

Child: This is Pascal and, etc.



Emerging Literacy Skills in Reading and Writing

Overview: This section builds on the language skills described in the preceding sections. The competencies described here go beyond oral language skills to early reading and writing skills. The goals ask children to add to their prior experiences with printed words in books by recognizing print in the daily environment and some ways it is used: to identify, to name or label (food, toys, streets, stores, etc.), to make lists, to report events, to give directions, to communicate messages, etc.

The section focuses on the relation between oral language and print. The goals ask children to associate specific familiar spoken words, such as their own names or names of familiar objects, with specific written words. Children then go on to recognize that the distinct marks that make up each word are letters in our alphabet. Children learn that these letters have names through such means as singing the alphabet song. They learn to identify and name the specific letters in their own names.

A crucial part of learning to read is developing phonemic awareness, the understanding that individual sounds are associated with individual letters and combinations of letters. To help children begin to develop phonemic awareness, the goals in this section ask children not only to refine their visual recognition of print but also to attend to the spoken sounds of language (for related topics, see the clapping and rhyming skills described in Nursery Rhymes, Poems, Fingerplays and Songs). Children are asked to take apart and put together smaller and smaller units of sound, from individual words in a sentence, to syllables in words, to the beginning sounds in individual words.

The goals here also include the skills needed to produce print, that is, to write. At first, children are asked to perform manual activities that enhance both hand-eye coordination and small muscle control of the hand and fingers. They learn the proper way to hold a writing implement, as well as a variety of small designs and strokes that will eventually be combined to form letters. They are also asked to write their own names.

I. FUNCTION

GOAL: DEVELOP AN AWARENESS OF WRITTEN MATTER/PRINT IN EVERYDAY SURROUNDINGS AND ITS MANY USES

Level I		Level II	
I-EL1.1	Identify different examples of print in the environment.		
I-EL2.1a	Dictate a caption for a drawing or photograph.	II-EL2.1b	Dictate a simple letter, invitation or thank you note.
I-EL2.2	Collect objects using an illustrated list (pictures labeled with words).		
I-EL2.3a	Use a simplified schedule of daily activities, depicted in pictures and words, to describe the order of events for the day, i.e., which are the first and last activities.	II-EL2.3b	Use a simplified, illustrated schedule of activities to indicate which activity preceded and which will follow an activity.
		II-EL2.4	Use a simplified, illustrated telephone listing.
		II-EL3.1	Represent "in written form" people, objects, events or activities, derived from one's personal experience or imagination.

**GOAL: DEVELOP AN AWARENESS OF WRITTEN MATTER/PRINT IN EVERYDAY SURROUNDINGS
AND ITS MANY USES**

Level I	Level II
	II-EL3.2 Dictate a description to accompany one's drawing of people, objects, events or activities, derived from one's experience or imagination.
	II-EL4.1 Follow a simple, illustrated recipe.
	II-EL4.2 Assemble a simple object or craft following illustrated directions.
	II-EL4.3 Represent "in written form," following an actual experience: directions for a recipe or craft or scientific observation of events or experiments.

II. FORM

GOAL: DEVELOP AN AWARENESS OF THE STRUCTURE OF PRINT

Level I	Level II
I-EL5.1 Recognize the initial letter of one's first name.	
 I-EL5.2 Recognize the written form of one's first name.	
	 II-EL5.3 Write one's first name, using uppercase and lowercase letters appropriately.
	II-EL5.4 Sing the "Alphabet Song."
	 II-EL5.5 Read the first names of other classmates or family members.
	II-EL5.6 Associate spoken and written language by matching written word labels with spoken words.
	 II-EL5.7 Point to words as distinct units on a page of print.
	II-EL5.8 Make beginning efforts to use invented, phonetic spelling to communicate in writing.

GOAL: DEVELOP PHONEMIC AWARENESS

Level I	Level II
	II-EL6.1  Segment a spoken sentence into separate, distinct words.
	II-EL6.2 Blend spoken parts of a compound word, saying a whole word.
	II-EL6.3  Blend two spoken syllables, saying the whole word.
	II-EL6.4 Given a sound and a choice of two words, choose the word that begins with the given sound.
	II-EL6.5  Give the beginning sound of a spoken word.
	II-EL6.6  Indicate the number of phonemes (one to three) heard in a real or nonsense word.
	II-EL6.7  Identify at least ten letters of the alphabet by name, especially those in the child's first name.
	II-EL6.8  Given a word, provide a rhyming word.
	II-EL6.9  Give the sounds of at least three letters of the alphabet, especially those in the child's own name.

GOAL: DEVELOP THE FINE MOTOR SKILLS AND STROKES USED IN WRITING

Level I	Level II
I-EL7.1	Perform activities requiring small muscle control.
I-EL7.2	Produce written marks on both horizontal and vertical surfaces.
I-EL7.3	Tear, fold and paste/glue paper.
I-EL7.4	Color a simple drawing, staying within the lines.

GOAL: DEVELOP THE FINE MOTOR SKILLS AND STROKES USED IN WRITING

Level I		Level II	
I-EL7.5a	Draw and use as motifs: horizontal line  vertical line  point  spiral 	II-EL7.5b	Draw and use as motifs: horizontal line  vertical line  diagonal line  zigzag line  circle  spiral  moon  cross  cane  hook  bowl  bridge  wave  x  star 
I-EL7.6	Draw horizontal and vertical lines between two end points.	II-EL7.7	Hold a writing instrument correctly between the thumb and index finger, resting it against the middle finger.
		II-EL7.8	Trace and then draw independently the outlines of geometric shapes and irregular figures.
		II-EL7.9	Write one's first name, using uppercase and lowercase letters appropriately.

LANGUAGE OF INSTRUCTION

Teacher and Children	Teacher Only
	SPECIFIC WRITING STROKES bowl bridge cane circle cross diagonal line hook horizontal line loop moon point spiral star vertical line wave x zigzag line MISCELLANEOUS ABCs alphabet
	capital letter color within the lines connect the dots/points curved line design dictate directions grid initial letter line lowercase letter outline print read sound straight line title trace uppercase letter word write

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Note: For clarity in working and communicating with young children, some descriptive terms should be consistently used in describing the individual writing strokes listed on page 32. The specific terms selected have no intrinsic value; the arbitrary names on page 32 are but one possibility. Undue effort should not be expended in teaching these terms to young children as part of their speaking vocabulary. However, when formal writing instruction in letter formation begins (for example, when the child learns to write his or her own name), the same names may be used by the teacher in describing these strokes as the various component elements of individual letters.

Example: Use vocabulary from the Emerging Literacy section as follows:

Adult: I’m going to draw some *points*. Here are two points. I want you to *connect these points* with a *straight line*. Can you start at this *point* and, with your finger, show me how you would *connect these points* using a *straight line*?

Child: (traces line)

Adult: Good. You made a *straight line* with your finger. Here’s a piece of string. I’m going to hold one end of the string on one *point*. Can you use the rest of the string to make a *straight line* to *connect the two points*?



Mathematical Reasoning and Number Sense

Overview: Young children seem to be naturally drawn to touching, manipulating and examining the objects they find around them. The goals of this section build upon this curiosity and desire to explore. In the context of experiences with concrete objects and then with pictures, the child is asked to recognize similarities and differences, classify objects and shapes, recognize/create patterns in sequences of objects and make comparisons among objects, using simple measurement skills. He or she is also asked to quantify small groups of objects, to count and to demonstrate a basic understanding of addition and subtraction as “putting together” and “taking away.” In each instance, the child is asked to move from the concrete experience to representing knowledge symbolically using mathematical language, such as “more than,” “less than,” “longer,” “shorter,” number words (“three” and “four”), numerical symbols (“3” and “4”), and so on.

GOAL: SORT AND CLASSIFY OBJECTS OR PICTURES OF OBJECTS

Level I	Level II
I-MR1.1a  Identify pairs of objects as the same or different, with different pairs varying in gross details.	II-MR1.1b Identify pair of objects or pictures as the same or different, with different pairs increasingly similar, varying only in one or more minor detail(s) and with images becoming more abstract and symbolic.
I-MR1.2a  Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort objects by color.	II-MR1.2b Classify by color.
I-MR1.3a Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort objects by shape.	II-MR1.3b Classify by shape.
	II-MR1.4 Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort by size (small-medium-large).
	II-MR1.5 Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort by function.
I-MR1.6 Indicate whether an object belongs to a given collection.	
	II-MR1.7 Classify by size.
	II-MR1.8 Classify by function.
	II-MR1.9 Classify by other conceptual categories.
	II-MR1.10 Verbally label the single common attribute or characteristic of a group of objects or pictures.
	II-MR1.11  Verbally label the difference or criteria used for classification of several groups of objects or pictures.

GOAL: SORT AND CLASSIFY OBJECTS OR PICTURES OF OBJECTS

Level I	Level II
	II-MR1.12 Select an object or picture according to a description that includes two properties.
	II-MR1.13 Use the criteria along the horizontal and vertical axes of a double entry table to complete the interior squares of the table.

GOAL: DUPLICATE AND CONTINUE LINEAR PATTERNS

Level I	Level II
I-MR2.1 Duplicate a pattern of six to ten objects in which one property is alternated.	
I-MR2.2 Match objects arranged in a pattern with corresponding pattern card.	
	II-MR2.3 Continue a complex, two-color pattern of objects represented by a pattern card.
I-MR2.4 Continue a given pattern of five objects, represented by actual objects or a pattern card, in which one property is alternated (color, size, shape).	
	II-MR2.5 Represent on paper "in written form" an alternating pattern of one property or a two-color pattern.
	II-MR2.6 Create and verbally describe a pattern of concrete objects.

GOAL: PERCEIVE AND RECOGNIZE SHAPES AND SIZES

Level I	Level II
I-MR3.1a Complete puzzles of at least ten interlocking pieces.	II-MR3.1b Complete puzzles of at least 18 interlocking pieces.
I-MR3.2 Match rectangular, square, circular, and triangular shapes to outlines of the same configuration and size.	
I-MR3.3a Given a collection of assorted shapes, sort and name the circles.	II-MR3.3b Given a collection of assorted shapes, classify and name the circles, rectangles and triangles.
	II-MR3.4 Find examples of circles or rectangles in everyday objects.

GOAL: USE SIMPLE MEASUREMENT SKILLS AND SERIATE OBJECTS

Level I	Level II
	II-MR3.5 Divide one item into approximately equal pieces for two people.
	II-MR3.6 Compare pairs of objects: length (long-short).
	II-MR3.7 Compare pairs of objects: height (tall-short).
	II-MR3.8 Compare pairs of objects: large-small, thick-thin, wide-narrow.
	II-MR3.9 Compare pairs of objects: volume (full-empty).
	II-MR3.10 Compare pairs of objects: mass (heavy-light).
	II-MR3.11 Compare pairs of objects: temperature (hot-cold).
	II-MR3.12 Use an arbitrary tool of measurement to compare the length and height of objects, using comparative vocabulary (longer-taller-shorter).
	II-MR3.13 Use a straight edge to compare the length and height of objects, using comparative vocabulary (longer-taller-shorter).
	II-MR3.14 Seriate at least three items by length, height or size in ascending or descending order, using comparative vocabulary (longest-shortest, tallest-shortest, largest-smallest).

GOAL: QUANTIFY GROUPS OF OBJECTS

Level I	Level II
I-MR4.1a Recite the number sequence, 1–4. 	II-MR4.1b Recite the number sequence, 1–10. 
I-MR4.2a Compare two groups of no more than four objects per group and use quantitative vocabulary to describe the groups (more than, less than, the same as).	II-MR4.2b Compare two groups of no more than six objects per group and use quantitative vocabulary to describe the groups (more than, less than, same as).
I-MR4.3a Demonstrate one-to-one correspondence with concrete objects, up to four objects.	II-MR4.3b Demonstrate one-to-one correspondence with concrete objects, up to six objects.
I-MR4.4a Construct a collection of objects so that it has the same number of objects as another group, up to four objects.	II-MR4.4b Construct a collection of objects so that it has the same number of objects as another group.
I-MR4.5a Count groups of objects with up to four items per group. 	II-MR4.5b Count groups of objects with up to six items per group. 
I-MR4.6a Given an oral number, create a group with the correct number of objects, up to four objects in a group.	II-MR4.6b Given an oral number, create a group with the correct number of objects, up to six objects.
I-MR4.7 Name the quantity/amount for one to four items.	

GOAL: QUANTIFY GROUPS OF OBJECTS

Level I	Level II
I-MR4.8  Match numerals 1–4 with corresponding quantities.	II-MR4.9 Name the quantity/amount for one to six items
	II-MR4.10 Write numerals 1–6.
	II-MR4.11  Arrange or write the numbers 1–6 in sequential order.
I-MR4.12  Identify ordinal position for first and last.	II-MR4.13 Play a simple game that involves moving one's marker the number of spaces shown on a single die.
	II-MR4.14 Organize and read quantitative data in simple bar graphs.

GOAL: COMPARE WRITTEN NUMERALS

Level I	Level II
I-MR5.1a Compare sets pairs of numerals, 1–4, to determine more and less or greater than and less than.	II-MR5.1b Compare pairs of numerals, 1–6, to determine more and less or greater than and less than.

GOAL: DEVELOP AN UNDERSTANDING OF ADDITION AND SUBTRACTION

Level I	Level II
I-MR6.1a  Illustrate the concept of “put together” and “take away” with sets of one to four objects, with four items being the maximum in any set.	II-MR6.1b  Illustrate the concept of “put together” and “take away” with sets of one to six objects, with six objects being the maximum in any set.
	II-MR6.2 Label the action of “put together” as adding and “take away” as subtraction.
	II-MR6.3 Add or subtract problems represented by numerals, 1–4, 4 being the largest numeral, using objects or pictures as needed.

GOAL: IDENTIFY MONEY

Level I	Level II
I-MR7.1a Identify and count up to four pennies.	II-MR7.1b Identify and count up to six pennies.
I-MR7.2 Identify a one-dollar bill.	
	II-MR7.3 Identify a quarter.
	II-MR7.4 Indicate that one dollar bill has more value than a penny or quarter.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
Classification different same	Measurement and Seriation cold empty first full heavy hot last light long(er) (est) middle narrow short(er) (est) tall(er) (est) thick thin wide	Classification classify color property sort the same as	light long(er) (est) middle narrow short(er) (est) tall(er) (est) thick thin wide
Quantities/ Counting all any equal fewer than larg(er) (est) less than more than none small(er) (est) some		Quantities/ Counting count how many number compare	
Money dollar quarter penny	Shapes circle rectangle triangle	Money bill coin money	Shapes corner cube curved line form outline pyramid round shape sphere square straight line
Addition and Subtraction addition subtraction		Addition and Subtraction add put together subtract take away	Patterns pattern continue the pattern extend the pattern
		Measurement and Seriation cold empty first full heavy hot last	Miscellaneous math mathematics

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Mathematical Reasoning and Number Sense section as follows:

Child: Look—I made two piles.

Adult: Let’s see what you did. Ah, you *sorted* the beads into two *different* piles or groups. (Pointing) Is this group the *same* or *different* than this group?

Child: (no response)

Adult: (Pointing) This group is d...

Child: ...*different*.

Adult: This group is *different* from this group. Can you tell me how they are *different*?

Child: This has red things and this has blue things.

Adult: Right—this group has red beads and this group has blue beads. You sorted the beads into two *different* groups according to their color. If I give you these other beads (pile of yellow and green beads), can you also sort them into two *different* groups according to their *color*?



History and Geography: Orientation in Time

Overview: The focus of this section is on the development of an inner sense of time; this orientation in time is essential not just as a referent point for future instruction in history, but also as another step towards personal autonomy, which requires that children be able to organize time, monitor behavior and independently accomplish given activities throughout the day, week and so on.

The child is asked first to organize and think about everyday experiences in regards to various indices of time: he or she is asked to classify experiences according to the time of day in which they occur, sequence events chronologically and begin to use standard measures of time, such as daily schedules and calendars. The child is also asked to consider the passage of time on a larger scale, developing a sense of the relationship of past-present-future, by sequencing events in his or her own life, considering the relationships within his or her own family, as well as sequencing stages within the life cycle. He or she is also asked to assume a historical perspective outside of his or her immediate experiences by examining familiar contemporary objects with similar objects from the past. Finally, the child is asked to represent these experiences symbolically, both with words and schematically in timelines and drawings.

GOAL: VOCABULARY: UNDERSTAND AND USE THE LANGUAGE OF TIME

Level I	Level II
I-OT1.1a  Understand and use temporal words to describe day-to-day occurrences: today-tomorrow, before-after, now, first-last, day-morning-afternoon-evening-night, current day, week, weekend, once upon a time, finally.	II-OT1.1b Understand and use temporal words to describe day-to-day occurrences: today-tomorrow-yesterday, always-never-sometimes, before-after, now-immediately, first-last, beginning-middle-end, then-next, already, soon, during-while, etc.
	II-OT1.2 Use present, past, and future tenses of verbs to describe day-to-day occurrences.

GOAL: MEASURES: ESTABLISH REFERENCE POINTS IN TIME

Level I	Level II
I-OT2.1  Classify and describe images of everyday activities according to the time of day with which they are associated: day-night, morning-afternoon-evening.	
I-OT2.2a  Sequence chronologically and describe three images of events or phases of a single event, occurring at temporally distinct times that have actually been experienced.	II-OT2.2b Sequence chronologically and describe three to five images of events or phases of a single event that have been experienced.
I-OT2.3a  Name the current day of the week.	II-OT2.3b Name the days of the week in sequence.
	II-OT2.4 Identify the days of the weekend.
	II-OT2.5 Name the day that was "yesterday" and the day that will be "tomorrow."
	II-OT2.6 Name the current month.
I-OT2.7  Identify the following by name: clock, schedule, calendar.	

GOAL: ESTABLISH REFERENCE POINTS IN TIME

Level I	Level II
I-OT2.9a  Use a schedule of daily activities represented in images to describe the order of events for the day.	II-OT2.8 Name own date of birth (month and day). II-OT2.9b Use a simple, illustrated schedule of daily activities to indicate which activity preceded and which will follow the current activity.
I-OT2.10  Use a weekly calendar to locate and name the current day of the week.	II-OT2.11 Use a monthly calendar to locate and name the current day of the week. II-OT2.12 Use a monthly calendar to name the current month. II-OT2.13 Use a monthly calendar to locate own date of birth. II-OT2.14 Use a monthly calendar to identify a horizontal series of seven squares as representing one week. II-OT2.15 Use a monthly calendar to name holidays and special events marked by symbols. II-OT2.16 Use a timeline: year-long timeline to mark annual events. II-OT2.17 Use a timeline: century-long timeline to mark events across several generations.

GOAL: DEMONSTRATE AN AWARENESS OF THE PASSAGE OF TIME AND OF PERIODS OF TIME AS "THE PAST," "THE PRESENT," OR "THE FUTURE"

Level I	Level II
	II-OT3.1 Sequence images depicting the evolution and completion of a project or undertaking over an extended period of time.
	II-OT3.2 Sequence and describe photos and/or drawings that represent a timeline of one's own life and experiences.
	II-OT3.3 Progression of the stages of development in the life of one person: Sequence and describe photos and/or drawings of a baby, school-age child, young adult, elderly adult.
	II-OT3.4 Generations within the context of family: Sequence and describe photos and/or drawings of a baby, school-age child, young adult, elderly adult.

**GOAL: DEMONSTRATE AN AWARENESS OF THE PASSAGE OF TIME AND OF PERIODS OF TIME AS
"THE PAST," "THE PRESENT," OR "THE FUTURE"**

Level I	Level II
	II-OT3.5 Arrange photos and/or drawings of members of one's own family on a genealogical tree or diagram to represent three generations.
	II-OT3.6 Consider photos and/or drawings of activities associated with specific periods of life in reference to present age/stage of development and indicate verbally whether these are activities that may be part of past, present or future experiences.
	II-OT3.7 Match images of contemporary objects with like objects from past, indicating whether the objects belong to the "present" or "past."
	II-OT3.8 Distinguish objects of the more "recent past" from objects of the "distant past."

LANGUAGE OF INSTRUCTION

Teacher and Children			Teacher Only	
References in Time	last	time	References in Time	Passage of Time
after	later	today	century	adult
afternoon	long ago	tomorrow		age
already	March	Tuesday		babychild
always	May	Wednesday	Measures of Time	future
April	Monday	week	date	grow
August	month	weekend	timeline	old
before	morning	while		past
day	never	year		the future
December	next			the past
during	night	Measures of Time		the present
evening	November	calendar		remember
February	now	clock		young
finally	October	schedule		
first	once upon a time	watch		
Friday	present			
immediately	Saturday	Passage of Time		
in a little while	September	a long time ago		
January	sometimes	change		
July	Sunday	then		
June	Thursday	long ago		

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Orientation in Time section as follows:

Child: (showing photos brought from home) This is me when I was little.

Adult: Let’s look at them together. Can you tell me about each of these pictures that were taken when you were a *baby*?

Child: This is me in my crib. I’m drinking a bottle. This is me too.

Adult: What were you doing in that picture?

Child: Don’t know.

Adult: It looks like you were crawling on the floor.

Child: Yeah—crawling. And this is me—outside.

Adult: Ahh, you were going for a ride in the stroller. Who is this *adult*? Who is pushing the stroller?

Child: Mommy.

Adult: So when you were a *baby*, Mommy took you for a ride in the stroller? I’m glad you have these pictures of things that you did when you were a *baby*. They’re things that already happened—they’re things you did in the *past*. It’s fun to remember things you did in the *past*. Can you *remember* any other things you did in the *past* when you were a *baby*?

Child: No.

Adult: Here are some drawings of *babies* doing different things. Maybe, they’ll help you remember something you did in the past when you were a *baby* (pointing). How about this?

Child: Diapers.

Adult: When you were a baby, you wore diapers. That was something you did in the *past*. You don’t wear diapers now!



History and Geography: Orientation in Space

Overview: The focus in this section is on the development of a sense of orientation in space, which enables the child to situate himself or herself in space in relation to his or her physical movements, as well as provides a context and vocabulary for later instruction in geometry and geography. The child is asked to situate first his or her own body, and then objects, in three-dimensional space in relation to other objects, as well as to follow and give spatially referenced directions. He or she is asked to establish reference points in two-dimensional space, copying various grid-like designs and completing mazes. The child is asked to demonstrate an understanding of several basic geographic features, such as ocean, mountain, island and so on. Finally, he or she is asked to represent these experiences symbolically, both with words and schematically on maps and simple drawings.

GOAL: UNDERSTAND AND USE THE LANGUAGE OF SPACE

Level I	Level II
I-OS1.1a Situate oneself in space or situate objects in relation to one another according to the indications given by spatial terms: there-here, in-on, in front of-behind, at the top of-at the bottom of, under, next to-in the middle of, near-far, around, etc.	II-OS1.1b Situate oneself in space or situate objects in relation to one another according to the indications given by spatial terms: here-there, in-on, in front of-behind, at the top of-at the bottom of, under-over, above-below, next to-in the middle of, etc.
	II-OS1.2 Follow or give oral, spatially related directions to move from one location to another within a familiar environment.
	II-OS1.3 Given oral, spatially referenced directions correlated to a picture in which different objects represent different "landmarks," trace the path described.

GOAL: ESTABLISH REFERENCE POINTS IN ACTUAL AND REPRESENTATIONAL SPACE

Level I	Level II
I-OS2.1a Reproduce a design, using parquetry blocks, mosaic toys or pegs, by placing the objects directly on top of a design card.	II-OS2.1b Reproduce a design represented on a pattern card using parquetry blocks, mosaic toys or pegs.
	II-OS2.2 Copy a tower or construction that has been made by another person using blocks of different shapes, colors or sizes.
	II-OS2.3 Match halves of symmetrical objects to make a whole.
	II-OS2.4 Color squares on a blank grid to reproduce designs represented on other grids.
	II-OS2.5 Continue a linear frieze-like pattern of symbols on a grid.

GOAL: ESTABLISH REFERENCE POINTS IN ACTUAL AND REPRESENTATIONAL SPACE

Level I	Level II
	II-OS2.6 Use simple coordinates to locate a point on a grid, in which points along one axis are designated by a symbol and points along the other axis are designated by a color.
	II-OS2.7 Use the shortest route to go from the exterior to the center of a simple maze.

GOAL: USE SIMPLE MAPS OF FAMILIAR ENVIRONMENTS

Level I	Level II
I-OS3.1a On a simple map of a single room showing furniture arrangement, indicate one's own position with an "X."	II-OS3.1b Mark the location of specific objects, places, etc., as requested on a simple map of a familiar place.
	II-OS3.2 Mark with arrows or other symbols a path that has been taken from one place to another on a simple map of a familiar place.

GOAL: DEMONSTRATE AN UNDERSTANDING OF BASIC GEOGRAPHIC CONCEPTS

Level I	Level II
I-OS4.1a  Identify these geographic features and environments by name in real life, photos or drawings: land, water, river, lake, ocean, farm, city.	II-OS4.1b  Identify these geographic features and environments by name in real life, photos or drawings: land, water, ocean, lake, river, farm, forest (woods), jungle, desert, city.
	K-OS4.2 Name the city, state and country in which he or she lives.
	K-OS4.3 Identify a map of the United States, indicating the location of his or her state.
	K-OS4.4 Identify a map of the United States, indicating land and ocean areas.
	K-OS4.5 Identify a globe by name, indicating land and ocean areas.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only
Reference	on	Reference
Points in Space	outside	Points in
above	over	Space
after	right	design
against	there	directions
around	to the side	graph paper
at the bottom	towards	grid
at the corner	under	half
at the top		maze
away from	Maps	path
back	country	pattern
back-to-back	globe	place
before	land	route
behind	map	space
below	ocean	whole
between	state	
face-to-face	United States	
far		
front	Geographic	
here	Concepts	
high	city	
in	countryside	
in a line/row	farm	
in a circle	forest	
in front of	island	
in the middle	jungle	
inside	lake	
left	ocean	
low	river	
near	woods	
next to		

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Orientation in Space section as follows:

Child: Look what I made.

Adult: What did you make?

Child: I colored.

Adult: Yes, you made a very pretty *design* on the *graph paper*. In your *design*, did you use the same color or a different color for each little box?

Child: Different colors.

Adult: Your *design* is very colorful because you used a lot of different colors—each box is different. Danny made a *design* on *graph paper* today, too. Maybe tomorrow you can exchange *designs*—you can see if you can copy Danny’s *design* and he can try to copy your *design*.

Scientific Reasoning



Scientific Reasoning and the Physical World

Overview: This section introduces children to a systematic way of looking at, describing and explaining the world around them. Children should be given many opportunities for systematic observation and hands-on investigation of both the living and material world. Building on these experiences, children can progress from describing and explaining what is observed to making predictions based on these observations.

This systematic approach may be summarized as: (1) reflect and ask questions, (2) plan an activity and predict what will happen, (3) carry out the activity and observe what happens, and (4) report findings (words, drawings, displays, photos, etc.) and reflect on other related questions.

It is worth emphasizing that the final step, documenting and representing observations and findings, is an especially important part of this process. In so doing, children may be guided in making the important transition and connection between “hands-on” investigation to symbolic representation. At the preschool level, keep in mind that a “picture is worth a thousand words.” Reporting of observations may often be more readily accomplished through drawings completed by the children, selection and display of objects or photographs, in addition to verbal explanations. This representational step will also enhance young children’s appreciation of science as “telling the story about how nature works.”

The goals here ask children to describe key physical characteristics, needs and the basic life cycle of plants and animals, including man, as well as identify basic properties of water, air and light. They are also asked to demonstrate how to use a variety of everyday tools.

GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE LIVING WORLD

Level I	Level II
Humans learn through the five senses I-SC1.1  Identify and describe objects on the basis of specific properties discerned through the five senses. Human bodies are made of many different parts I-SC1.2  Name body parts: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, nose, stomach, toe (Same objective as 3LD-LA-D1B and 3SD-AS-A3).	II-SC1.3 Identify the following organs and their function: heart, lungs. II-SC1.4 Identify the sense and body part associated with the experience of certain sensations. II-SC1.5 Identify and describe basic needs: food, drink. II-SC1.6 Identify and describe basic needs: shelter, protection from temperature and weather.

GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE LIVING WORLD

Level I	Level II
Humans go through different stages as they grow	II-SC1.7  Describe key physical characteristics (body parts and senses), development, needs and life cycle of humans. II-SC1.8 Sequence photos and/or drawings of a baby, school-aged child, young adult and elderly adult to represent the life cycle.
Animals are living things	II-SC1.9  Care for, observe and record observations of an animal, noting key physical characteristics, development, needs and life cycle.
Animals live in many kinds of homes	II-SC1.10  Classify images of animals according to habitat or environment in which they generally live: lake/river, ocean, farm, forest (woods), jungle.
Plants are living things	II-SC1.11  Plant, care for and record observations of a plant, noting the parts of the plant, needs, development and life cycle.

GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE ELEMENTS OF THE MATERIAL WORLD

Level I	Level II
Water	II-SC2.1  Observe, describe and record some basic properties of water, its presence and its effects in the physical world.
Air	II-SC2.2  Observe, describe and record some basic properties of air, its presence and its effects in the physical world.
Light	II-SC2.3  Observe, describe and record some basic properties of light, its presence and its effects in the physical world.
Seasons and weather	II-SC2.4 Observe, describe and record some characteristics of weather. II-SC2.5 Observe, describe and record some characteristics of seasons.

GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE ELEMENTS OF THE MATERIAL WORLD

Level I	Level II
Conservation	K-SC2.6 Identify and describe objects that can be recycled.
	K-SC2.7 Identify and describe some ways that resources and energy can be conserved (e.g., recycling, turning off the lights, turning off the water, etc.).
Magnets	K-SC2.8 Observe, describe and record the effects of magnets on various objects and other magnets.

GOAL: SELECT AND USE TOOLS

Level I	Level II
	II-SC3.1 Cooking: spoon, rolling pin, etc.: Select and use appropriate tool to complete a task.
I-SC3.2a Select and use scissors to cut straight lines.	II-SC3.2b Cut: Scissors: Select and use appropriate tool to complete a task.
	II-SC3.3 Join Paper: Stapler: Select and use appropriate tool to complete a task.
	II-SC3.4 Join Fabric: Needle and thread: Select and use appropriate tool to complete a task.
	II-SC3.5 Nail, join wood: hammer: Select and use appropriate tool to complete a task.
	II-SC3.6 Dig a hole: Trowel, shovel: Select and use appropriate tool to complete a task.
	II-SC3.7 Water a plant: Watering can, hose: Select and use appropriate tool to complete a task.

GOAL: DEMONSTRATE USE OF THE SCIENTIFIC REASONING CYCLE

Level I	Level II
	II-SC4.1 Demonstrate use of the scientific reasoning cycle.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
Animals	Plants	Animals	Material World
air	air	birth	ice
alive	alive	development	light source
animal	bulb	flow	liquid
blood	flower	growth	shadow
breathe	fruit	life cycle	solid
farm	grow	sense	state
forest	leaf	temperature	steam
grow	light	weather	
hearing	living		General
heart	plant	Plants	describe
jungle	roots	development	explain
lake	seed	growth	observation
living	stem	life cycle	observe
lungs	water	shoot	record
move		soil	report
ocean	Material World	sprout	predict
river	air	temperature	science
salty	alive	weather	
smell	light		Tools/Construct
sour	living		build
sweet	not living		construct
taste	sun		create
touch	water		tool
water	wind		utensil

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Scientific Reasoning and the Physical World section as follows:

Child: Oh, look—there are green things coming out of the dirt!

Adult: Ahh, you’re right! I see a little green *stem*. Look carefully—what do these two little things on the top of the *stem* look like?

Child: Other parts.

Adult: Yes, each one is a little *leaf*. Can you gently point to the *leaf* on each side of the *stem*?

Child: Here and here?

Adult: That’s right, those are the *leaves*. Now, where do you suppose the *stem* came from? How did it get here in the *soil*?

Child: (silence)

Adult: Do you remember what you *planted* in the *soil* a couple of days ago?

Child: A *seed*.

Adult: That's right. Look at the drawings you've made so far to *record* your *observations*. See, in the first picture, you drew a picture of the *seed* in the *soil*. Tell me about this next picture. What did you draw?

Child: It's the *seed* in the dirt. I'm giving it some *water*.

Adult: (pointing) What else is the *seed* getting in your picture?

Child: The *sun*.

Adult: Right. The *sun* and *water* made this green *stem* *grow* from the *seed*. Do you think it would be a good idea to draw another picture of your *observations* today?

Music

Overview: This section includes goals that focus both on listening to, enjoying, and appreciating music in all its various forms, as well as producing music. Experiences in listening to and singing songs and fingerplays also provide opportunities to practice oral language skills. Music affords the opportunity to expand and clarify various concepts, such as loud and soft, fast and slow, etc. In addition, efforts that focus attention on discriminating differences in discrete environmental or musical sounds facilitate subsequent attention to phonemic awareness, awareness of the discrete sounds of language. Group musical experiences, performing or singing together, also offer the opportunity to practice social skills.

The basic goals of this section ask the child to listen to and identify sounds, indicate whether certain sound pairs are the same or different, imitate sounds and rhythm sequences, sing songs individually and with others, and move interpretatively to music.

GOAL: LISTEN TO AND DISCRIMINATE DIFFERENCES IN SOUND

Level I	Level II
I-MU1.1 Identify the direction from which a sound originates.	
I-MU1.2 Listen to and identify environmental sounds.	
I-MU1.3a Listen to pairs of sounds that are either identical or grossly different and indicate whether they are the same or different.	II-MU1.3b Listen to pairs of sounds that are either identical or slightly different and indicate whether they are the same or different.
I-MU1.4 Indicate the number of sounds heard (up to four sounds).	
	II-MU1.5 Identify family members or friends by their voice alone.
	II-MU1.6 Listen to environmental sounds presented sequentially as a "sound story" and describe the events in the context in which they are occurring.
	II-MU1.7 Identify and associate sounds with the objects and instruments (rhythm band, piano and violin) which produce them.
	II-MU1.8 Identify a selection of music as either vocal or instrumental music.

GOAL: IMITATE AND PRODUCE SOUNDS

Level I	Level II
I-MU2.1 Vocally or with musical instruments, produce sounds that are loud or soft and long or short according to verbal direction.	
I-MU2.2 Vocally imitate isolated sounds produced by others, approximating intensity, duration and pitch.	

GOAL: IMITATE AND PRODUCE SOUNDS

Level I	Level II
I-MU2.3a Imitate clapping pattern sequences of no more than three claps per pattern.	II-MU2.3b Imitate clapping pattern sequences of at least four claps per pattern that vary in tempo, number, length of pause between claps, etc.
I-MU2.4a Use musical instruments or other objects to imitate a sequence of no more than a musical motif of three sounds made by a single instrument or object.	II-MU2.4b Use musical instruments or other objects to imitate a sequence of three or more sounds made by more than one instrument.
I-MU2.5 Accompany a story or musical piece by introducing sound effects at the appropriate moment.	II-MU2.6 Accompany an adult by either clapping or using rhythm instruments to maintain the beat in a chant, song or other musical piece.

GOAL: LISTEN TO AND SING SONGS

Level I	Level II
I-MU3.1a Listen to, sing and perform children's songs and fingerplays with others.	II-MU3.1b Listen to, sing and perform children's songs and fingerplays individually or with others.
I-MU3.2a Sing a musical dialogue in which two or more groups answer one another.	II-MU3.2b Sing a round for two or more groups.

GOAL: LISTEN TO AND MOVE TO MUSIC OF DIFFERENT STYLES AND PERIODS

Level I	Level II
I-MU4.1 Move to music individually, interpreting and modifying movements according to the tempo, intensity and rhythm.	
I-MU4.2 Move to music with a partner or group, performing very simple movements.	
	II-MU4.3 Move to music carrying out a sequence of choreographed steps or movements to music.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
different	piano	beat	repeat
fast	same	clap	rhythm
high	short	clapping pattern	rhythm band
listen	sing	composer	instruments
long	slow	copy	rhythm sticks
loud	soft	drum	round
low	song	fingerplay	sing
music	violin	imitate	solo
		instrument	sound
		instrumental	sound effects
		maracas	tambourine
		melody	triangle
		musician	verse
		orchestra	vocal music
		refrain	voice

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Music section as follows:

- Adult: *Listen*—I’m going to *clap* my hands—I’m going to make a *clapping pattern*.
Listen carefully. When I finish, I’m going to ask you to try to *copy* it. (clap pattern)
- Adult: Okay, I’m going to *repeat* the *clapping pattern*, but this time, you try to do it with me. (adult and child clap together)
- Adult: Now I’m going to make a new *clapping pattern*. *Listen* carefully. When I finish, I will ask you to *repeat* it by yourself.

Visual Arts



Visual Arts

Overview: This section focuses not only on producing art, but also on examining and appreciating examples of various art forms. The use of various media and techniques provides rich opportunities for sensory exploration and manipulation, as well as the development of fine motor skills. In addition, through painting and drawing, children make their first attempts at graphic representation, a precursor to writing. The guided examination of works of art provides practice in focusing attention on visual detail, important for developing skill in discriminating visual differences in objects, images, print and letters, as well as appreciating basic elements of art. The further examination and discussion of works of art also afford rich opportunities for language development.

The basic goals of this section ask children to attend to visual details, identify images that are the same or different, create both representational and nonrepresentational art using various media and techniques, create art in the style of a known artist and examine and talk about selected works of art, including their own creations.

GOAL: ATTEND TO VISUAL DETAIL OF OBJECTS AND IMAGES

Level I	Level II
I-VA1.1 Identify pairs of objects or images as the same or different.	
I-VA1.2a Play games requiring matching of like images, such as lotto games.	II-VA1.2b Play games requiring matching of like images such as domino games.
I-VA1.3a Identify the colors red, yellow, blue, green, orange, purple, brown, black, white.	II-VA1.3b Identify from memory the color of objects from nature, when not in view.
I-VA1.4a Demonstrate memory of visual details by identifying what is different after a collection of objects is examined, removed from sight, altered and reintroduced.	II-VA1.4b Demonstrate memory of visual details by playing "Concentration" type memory games.

GOAL: EXPLORE AND CREATE, USING VARIOUS ART FORMS, MEDIA, AND TECHNIQUES

Level I	Level II
I-VA2.1 Tear: Use various tools and techniques in completing art projects.	
I-VA2.2 Paste: Use various tools and techniques in completing art projects.	
I-VA2.3 Use stickers: Use various tools and techniques in completing art projects.	
I-VA2.4 Fold: Use various tools and techniques in completing art projects.	
I-VA2.5 Tape: Use various tools and techniques in completing art projects.	
	II-VA2.6 Staple: Use various tools and techniques in completing art projects.



GOAL: EXPLORE AND CREATE, USING VARIOUS ART FORMS, MEDIA, AND TECHNIQUES

Level I	Level II
I-VA2.7a Cut straight lines: Use various tools and techniques in completing art projects.	II-VA2.7b Cut: Use various tools and techniques in completing art projects.
	II-VA2.8 Sew: Use various tools and techniques in completing art projects.
I-VA2.9 Create drawings (nonrepresentational).	
I-VA2.10 Create paintings (nonrepresentational).	
I-VA2.11 Create prints (nonrepresentational).	
I-VA2.12 Create collage (nonrepresentational).	
I-VA2.13 Create sculpture (nonrepresentational).	
I-VA2.14 Create drawings (representational).	
I-VA2.15 Create paintings (representational).	
I-VA2.16 Create prints (representational).	
I-VA2.17 Create collage (representational).	
	II-VA2.18 Create sculpture (representational).
	II-VA2.19 Examine a work of art by a known artist and create a work "in the style of..." (Rhythm by Delaunay; Blue Hippo; Head of a Man by Klee; The Snail by Matisse; People and Dog in Sun by Miro; Broadway Boogie Woogie by Mondrian).
	II-VA2.20 Work with other children to create a collective work of art, such as a large group mural, collage, etc.

GOAL: DEVELOP AN APPRECIATION FOR ART

Level I	Level II
	II-VA3.1 Look at and talk about works of art, describing details and "story" depicted, such as objects, people, activities, setting, time day/year, long ago/contemporary, etc. as well as the mood/feeling elicited.
	II-VA3.2 Describe one's own art work, explaining the materials and techniques used.

LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
art	paint	artist	mural
black	paste	brush	museum
blue	purple	chalk	original
brown	rectangle	collage	painter
circle	red	compare	painting
color	same	copy	print
cut	scissors	create	real
different	tape	creativity	remember
draw	triangle	curved line	sculptor
glue	white	detail	sculpture
green	yellow	easel	shape
orange		feelings	staple
		fold	straight line
		imaginary	tear
		imagination	technique
		line	title
		materials	tool
		mood	

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Visual Arts section as follows:

Adult: This is a picture of a *sculpture* that was *created* by the *artist* Edgar Degas. Can you tell me about this *sculpture*? What do you see?

Child: It’s a person.

Adult: Uh huh, it’s a *sculpture* of a person. What kind of person? Is it a man or woman? Or is it a girl or boy?

Child: It looks like a girl ‘cause she has a pony tail.

Adult: So it’s a *sculpture* of a girl. How is she dressed? Is she wearing regular clothes?

Child: No—she looks like she’s wearing a funny short skirt

Adult: Yes, she is. She’s wearing a special costume that’s used for dancing, etc.

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