

# CONTENTS

## PRESCHOOL Early Learning Standards

### *Area 7: Physical Well-Being and Motor Development*

- 7.1 Healthy and Safe Living
- 7.2 Play and Senses
- 7.3 Large Motor Development
- 7.4 Fine Motor Development

### *Area 8: Approaches to Learning*

- 8.1 Curiosity and Initiative
- 8.2 Engagement and Persistence
- 8.3 Problem Solving

### *Area 9: Social and Emotional Development*

- 9.1 Self
- 9.2 Self-Regulation
- 9.3 Relationships and Caregivers
- 9.4 Peer Interactions
- 9.5 Awareness of Community

### *Area 10: Communication, Language, and Literacy*

- 10.1 Language Understanding and Use
- 10.2 Early Literacy
- 10.3 Early Writing

### *Area 11: Mathematics and Science*

- 11.1 Comparison and Number
- 11.2 Patterns
- 11.3 Shapes and Spatial Relationships
- 11.4 Scientific Reasoning
- 11.5 Scientific Problem Solving
- 11.6 Measurement

### *Area 12: Creative Arts*

- 12.1 Art
- 12.2 Music, Rhythm, and Movement
- 12.3 Dramatic Play

<b>C</b>	=	<b>Career Education</b>
<b>G</b>	=	<b>Global Education</b>
<b>GF</b>	=	<b>Gender Fair</b>
<b>MC</b>	=	<b>Multicultural Approaches</b>
<b>H</b>	=	<b>Health</b>
<b>S</b>	=	<b>Safety</b>

# PRESCHOOL Standards

## Physical Well-Being and Motor Development

### Area 7

#### 7.1 Healthy and Safe Living

##### Standard

Children understand healthy and safe living practices.

##### Rationale

Children's physical well-being provides the foundation for their ability to learn. Young children are beginning to establish life-long eating habits that can help prevent disease, obesity, and other health problems (U. S. Department of Health and Human Services, 1996). Healthy eating provides needed nourishment for children's brains and for their physical activities. Accidents are the chief cause of death in young children (Maternal and Child Health Bureau, 2003). Appropriate levels of risk encourage exploration without undermining children's safety. Even very young children can begin to learn about personal safety.

##### Benchmarks

The child:

1. begins to recognize and select healthy foods. H
2. follows healthy self-care routines (brushing teeth and washing hands). H
3. demonstrates safe behaviors regarding environment (stranger, tornado, fire, traffic), substances (drugs, poisons), and objects (guns, knives, scissors). HS

##### Examples of Benchmarks

The children are eating lunch family-style. The caregiver helps herself to the broccoli and passes it around the table. Abdul puts a spoonful on his plate: "They're little trees." Caregiver: "Tell me why you think they look like trees." Abdul: "They're green and leafy." Caregiver takes a bite. "I like broccoli." Abdul takes a bite: "Me, too." Caregiver: "And broccoli helps our bodies grow." Abdul: "I'm going to grow as big as my dad." Kendal's nose is running. Caregiver: "I see your nose is running. How can you take care of that?" Kendal gets a tissue and wipes his nose. He returns to play. Caregiver: "Kendal, you need to wash your hands after you wipe your nose." Kendal washes his hands.

##### Caregiving Supports

With preschoolers, caregivers:

- model appropriate mealtime behavior and engage *each* child with appropriate mealtime conversations to make mealtime pleasant.
- encourage *each* child to learn and develop self-help skills (e.g., washing hands) during mealtimes and food activities.
- plan and implement emergency and safety procedures, such as fire, disaster, and tornado drills.
- teach *each* child to use medications with caregiver supervision and to avoid poisons.
- provide nutritious meals and snacks, including giving *each* child opportunities to prepare nutritious foods.
- uses adaptive equipment to help children with special needs develop self-help skills.

# Physical Well-Being and Motor Development

## Area 7

### 7.2 Play and Senses

#### Standard

Children engage in play to learn.

#### Benchmarks

According to Bruner (1985, p. 905): “Playful, negotiatory, flexible, mindful interaction early on may become a model later for what you do when you encounter problems. Having played around in fact, and with good effects, you may now feel encouraged to play around in your own head.” Numerous research studies link daily physical activity to health at all ages (U. S. Department of Health and Human Services, 1996). Current recommendations are for children to have several hours of unstructured movement each day (National Association for Sports and Physical Education, 2003). Children develop physical fitness (i.e., strength, flexibility, and endurance) from a variety of child-initiated and caregiver-directed activities.

#### Rationale

The child:

1. participates in a variety of indoor and outdoor play activities that increase strength, endurance, and flexibility. H
2. uses sights, smells, sounds, textures, and tastes to discriminate between, explore, and experience activities and materials.

#### Examples of Benchmarks

Cyndi is climbing on the jungle gym. “I’m a pirate and I’m climbing to the top of the mast.” Caregiver:

“You are climbing high in the air, Cyndi.” Cyndi: “I’m at the top of the mast now. I can see China!”

Caregiver: “What do you see?” Cyndi: “I can see the tops of the trees and the road and cars.”

Caregiver: “You’re so high in the air; you can see farther than I can!” Cyndi: “I’m on top of the world!”

#### Caregiving Supports

With preschoolers, caregivers:

- use the outdoor environment and natural settings as an integral part of *each* child’s active and quiet learning.
- provide materials and encourage *each* child to use all their senses to explore materials.
- provide materials in both outdoor and indoor environments that are easily accessible by *each* child.

# Physical Well-Being and Motor Development

## Area 7

### 7.3 Large Motor Development

#### Standard

Children develop large motor skills.

#### Rationale

Development of large motor skills (running, jumping, throwing, catching, balancing, climbing) is influenced both by maturation and experience (Cratty, 1970). While young children are learning motor skills, they typically show a variety of ways of performing the skill. With experience, children are able to perform skills more consistently. By five years of age, children show more integrated skills, such as the use of arms to aid jumping or a shift in weight to aid throwing.

#### Benchmarks

The child:

1. shows control and balance in locomotor skills, such as walking, running, jumping hopping, marching, galloping, and skipping. S
2. shows abilities to coordinate movements with balls, such as throwing, kicking, catching, and bouncing. S

#### Examples of Benchmarks

The children are in a large circle. The caregiver puts on a CD with the William Tell Overture (Lone Ranger theme). “How does this music make you want to move? Let’s move in this direction.” All the children move clockwise around the circle. Briana gallops; Tsama hops. Caregiver: “Look how Briana is using her feet—she’s galloping.” A few children start galloping. Caregiver: “Tsama has a good idea; he’s hopping on one foot.” A few more children hop. After a few minutes, the caregiver stops the CD. The children stop. The caregiver has placed an empty basket against the wall with a basket of foam balls close by. Mira throws a ball that bounces off the wall. Mira: “Teacher, I can’t get it in the basket.” Caregiver: “What could you try, Mira?” Mira: “I could move closer.” Caregiver: “Good idea. Let’s see what happens.” Mira moves closer to the empty basket, picks up another ball, and throws it into the basket. Caregiver: “You made a basket.” Mira smiles.

#### Caregiving Supports

With preschoolers, caregivers:

- provide space, time, and materials for *each* child to explore and practice large motor activities such as balancing, running, jumping, climbing, throwing, catching, kicking, and bouncing.
- play games with *each* child that involve catching, kicking, and bouncing balls, coaching *each* child and modifying the games to both challenge *each* child and to allow them to be successful.
- provide adaptive large motor equipment that allows *each* child with physical disabilities to practice large motor skills.

# Physical Well-Being and Motor Development

## Area 7

### 7.4 Fine Motor Development

#### Standard

Children develop fine motor skills.

#### Rationale

Fine (small) motor skills require the child to manipulate objects with accurate, controlled, precise movements. With practice, children also become skilled in self-care skills, such as buttoning, snapping, and zipping. Through manipulating small objects, such as stringing beads, young children gain fine muscle control needed for using tools (Cratty, 1970). With experience, young children gain skills in using tools such as eating utensils, crayons, and brushes. Initial scribbles become letter-like forms as children watch caregivers model writing (Iowa Department of Education, 2001). These skills provide the basis for handwriting and other fine-motor skills needed for success in daily life and in school.

#### Benchmarks

The child:

1. uses hand-eye coordination to perform self-help and fine-motor tasks with a variety of manipulative materials. S
2. shows increased skills in using scissors and writing tools for various learning activities. S

#### Examples of Benchmarks

Beth has been painting a picture at the easel: "Teacher, I'm done." Caregiver:

"Where are you going to put your name?" Beth: "Here. You do it. Here."

She points to the upper left corner. Caregiver prints 'Beth.' Beth takes the paintbrush and prints her name in all capital letters below where the caregiver printed her name.

Jamar has cerebral palsy. When he tries to spoon up applesauce, the bowl slides away. The caregiver puts a non-slip pad under the bowl and a rubber tube on his spoon handle. Jamar feeds himself without the bowl slipping.

Nieseem is trying to zip his jacket, but he can't get the two parts together.

"Teacher, help!" Caregiver: "What's wrong, Nieseem?" Nieseem: "I can't get the zipper to work."

Caregiver: "It is hard, isn't it? Do you want me to start it for you?" Nieseem: "Yes." The caregiver puts the ends of the zipper together starts the pull. "Here—you can finish it now." Nieseem pulls up the zipper.

"Let's go outside!"

#### Caregiving Supports

With preschoolers, caregivers:

- provide a variety of fine motor tools and materials (beads, pegboards, scissors, crayons, paintbrushes, hammers) that are available and accessible for use in child-directed activities.
- coach *each* child to improve self-help skills (dressing, toileting, buttoning).
- teach *each* child to use utensils (spoons, forks, knives) during meals, snacks, and supervised cooking activities.
- provide adaptive equipment that allows *each* child with physical disabilities to increase their fine motor skills.

# Approaches to Learning

## Area 8

### *8.1 Curiosity and Initiative*

#### **Standard**

Children express curiosity, interest, and initiative in exploring the environment, engaging in experiences, and learning new skills.

#### **Rationale**

Erikson (1950) represented the internal conflict of initiative versus guilt as central to the preschool years. Initiative—trying activities—is a key part of the development of competence. When the child has lots of failures, especially those the child sees as his/her “fault,” the child is less likely to try new activities and to learn new skills. Children who hesitate and avoid new experiences often have experienced repeated failures (Smiley and Dweck, 1994). Children are more likely to initiate and explore activities when they see that the results depend on their actions (Bandura, 1997). Caregivers influence this development by making such activities available for children and encouraging them to try activities at which they are likely, with effort, to be successful (Kopp, 1991). Children are more likely to repeat activities when caregivers give them encouragement and feedback that links their effort to results (Skinner, 1995).

#### **Benchmarks**

The child:

1. explores and experiences activities and ideas with eagerness, flexibility, imagination, independence, and inventiveness. C
2. chooses to explore a variety of activities and experiences with a willingness to try new challenges. C

#### **Examples of Benchmarks**

Chris is standing in front of the blocks. “I’m going to build a fire station like the one we visited.”

Caregiver: “Good plan, Chris. We need fire stations so fire fighters can put out fires.” Chris builds four walls. He puts the fire engines inside. He attempts to put blocks on top of the building, but they fall through. Chris: “Teacher, the roof keeps falling down.” Caregiver: “Looks like these blocks aren’t long enough. What else could you use?” Chris: “I could put those big pieces of cardboard for the roof.” He puts a piece of cardboard on top, stands back, and smiles. Caregiver: “You did it, Chris. You built a fire station to hold all the fire trucks.” Emily is looking at the fish tank. “Teacher, every day the water gets lower and lower in the fish tank.” Caregiver: “You’re right, it does. Why do you think that happens, Emily?” Emily: “I think the fish are thirsty, and every day they drink more and more of the water.”

#### **Caregiving Supports**

With preschoolers, caregivers:

- provide an environment with a variety of activities and materials for child-initiated exploration.
- encourage *each* child to express their own ideas and exercise their imagination.
- provide a variety of activities and materials to challenge and encourage *each* child’s developing skills.
- share *each* child’s excitement in discoveries and exploration of the environment.
- encourage *each* child to make choices and plan interactions with people and materials in their environment.
- provide opportunities and time to explore a variety of activities and materials including those in their larger community environments.

# Approaches to Learning

## Area 8

### 8.2 Engagement and Persistence

#### Standard

Children purposefully choose and persist in experiences and activities.

#### Rationale

Children who believe that success depends on their efforts, and that they are capable of being successful, are more likely to persist (Bandura, 1997). Young children who have been given some autonomy are more likely to complete tasks (Grolnick, 1984). Play provides an appropriate setting for learning about engagement, persistence, and risk-taking. Without concerns for how their work will be evaluated, children are able to experiment and explore. Caregivers encourage persistence by guiding children to tasks where their effort is likely to achieve success, by giving only the minimum help necessary to complete the task, and by giving children specific feedback that their success was due to their own efforts (Skinner, 1995).

#### Benchmarks

The child:

1. persists in and completes a variety of both caregiver-directed and self-initiated tasks, activities, projects, and experiences. C
2. maintains concentration on a task. C

#### Examples of Benchmarks

Dee goes to the block corner. She carefully lays out a grid of long blocks, putting a series of blocks that are one, two, or three blocks high in the spaces of the grid. She then takes a car and drives it on the grid. Dee: "Teacher, here's our school. See the parents bringing all the kids to school." Teacher:

"You worked a long time to make such a big town with so many streets, houses, and a school, too!" Dee points to a large building: "And here's the grocery store. Everyone goes there to get food for supper."

Teacher: "That is an important store in the town."

Mai chose a puzzle from the rack. After a few minutes, she pushes away the partially completed puzzle:

"This is too hard." Caregiver: "Let's turn over all the pieces so you can see each picture." Mai does so. She looks at all the pieces. The caregiver points to a rounded shape in the border: "Look at this.

Can you find a piece with this shape?" Mai fits the shape into the space: "I did it! It's a wheel. And here's another wheel." She continues to assemble the puzzle. "I did it!" Caregiver: "You got all the pieces into the puzzle." Mai smiles, "Let's do another one." The caregiver is reading a story about a curious monkey.

Geovanni is getting restless. Caregiver: "Geovanni, what do you think George will do with the newspapers?" Geovanni: "He'll read them." Caregiver: "Let's see." She turns the page and continues to read. Geovanni sits quietly, watches, and listens.

#### Caregiving Supports

With preschoolers, caregivers:

- provide an environment with a variety of activities and materials for child-initiated exploration.
- provide clearly defined areas with minimal distraction and some protection to encourage sustained involvement with peers and materials.
- maintain a routine; provide opportunities and sufficient time for engagement in self-selected activities.
- guide *each* child's learning and development by responding to questions, ideas, and requests for help, by being present with and fully attending to children, and by individualizing their responses to children.
- provide support and assistance as needed to support the involvement of *each* child with special needs.

# Approaches to Learning

## Area 8

### 8.3 Problem Solving

#### Standard

Children demonstrate strategies for reasoning and problem solving.

#### Rationale

Problem solving is natural for young children, for whom so much of the world is new. Problem solving is learned through daily living experiences involving issues important to the child. At the same time, children who repeatedly experience failures and criticism are less likely to attempt new problems (Smiley and Dweck, 1994).

#### Benchmarks

The child:

1. shows interest in and finds a variety of solutions to questions, tasks, or problems. C
2. recognizes and solves problems through active exploration, including trial and error, and through interactions and discussions with peers and caregivers. C,G

#### Examples of Benchmarks

José and Michael are running their trucks up the slide while other children are going down the slide. Caregiver: "It's not safe to have trucks and children on the slide at the same time." José: "But the trucks go faster when they go down the slide." Caregiver: "Yes, the trucks do go much faster when they go downhill. What else could we set up to make the trucks go faster?" José: "We could make a slide with blocks." Caregiver: "Let's see if that would work." José and Michael take the trucks to the block area, where they stack four blocks and tilt a board against the blocks. They put the trucks down the board. "See, they go really fast." Caregiver: "Yes, you built a ramp where trucks can go very fast." It's story time. Damon: "I can't see." Caregiver: "What could you do so that you could see better?" Damon looks around, then moves to a spot where he can see better. Gayle is at the water table trying to fill a bottle by using a funnel to carry the water to the bottle. Most of the water escapes before reaching the bottle. Caregiver: "I see the water is running out from the hole at the bottom of the funnel. Is there anything else you could use to fill the bottle?" Gayle looks around, then goes to the dramatic play center and returns with a toy coffee pot.

#### Caregiving Supports

With preschoolers, caregivers:

- provide opportunities for *each* child to try new ways of using materials.
- create environments that offer an appropriate amount of stimulation and choice for *each* child using different types of equipment and materials.
- allow *each* child time to process experiences and information as well as devise alternatives.
- select and use appropriate materials that promote creativity, self expression, number, and emerging literacy skills.
- engage *each* child in problem-solving with peers and the environment.
- provide appropriate challenges within a safe, predictable environment.

# Social and Emotional Development

## Area 9

### 9.1 Self

#### Standard

Children express a positive awareness of self in terms of specific abilities, characteristics, and preferences.

#### Rationale

Young children typically overestimate their own abilities. At the same time, they equate effort and ability. They assume that failure represents both a lack of effort and ability (Nicholls, 1978). After repeated failures, some young children have already acquired learned helplessness, a belief that they cannot succeed in anything that they try. Learned helplessness (Dweck and Smiley, 1980) affects later subsequent learning. Therefore, it is essential to help young children see themselves as capable learners and to develop resilience.

#### Benchmarks

The child:

1. expresses sense of self in terms of specific abilities. C
2. expresses needs, wants, and feelings in socially appropriate ways.
3. shows increasing confidence and independence in a variety of tasks and routines, expresses pride in accomplishments. C

#### Examples of Benchmarks

It is clean-up time. Rhonda goes to the story area and sits down. Caregiver: “Rhonda, we need help picking up in the block area and in dramatic play. Where would you like to work?” Rhonda goes to the block area. As she is putting blocks away, the caregiver says: “You’re putting away lots of blocks—now no one will trip on them.” Rhonda smiles. “No one will trip on the blocks; I put them away.” James is wandering around during self-selection time. Caregiver: “James, at that table we need help making muffins. Or you could build with the blocks over there.” James: “I like blocks.” He goes to the blocks. Kai is always bringing insects. Then David brings in an insect and asks: “Teacher, what is this bug?” Caregiver: “Let’s ask Kai—he’s our Bug Expert!” No children have used the dramatic play center for several days. In group time, the caregiver asks if the children have any other ideas for the center. Karen: “We could have a restaurant, like my mom works in.” Tom: “We could have a vet clinic, like my mom works in.” Caregiver: “We have two ideas: a restaurant and a vet clinic. We can do one first and the other later. Raise your hand if you want to do the restaurant first.” The children choose to do the restaurant first.

#### Caregiving Supports

With preschoolers, caregivers:

- provide opportunities for *each* child to develop a sense of their physical self.
- talk with and listen respectfully to *each* child.
- provide *each* child with a safe and stimulating setting in which to explore.
- provide *each* child with opportunities to make meaningful choices and express their preferences throughout the day.
- encourage *each* child by giving specific feedback that links effort to outcomes.
- model respect for diversity.
- provide *each* child with opportunities to solve problems on their own.
- link *each* child’s efforts to the outcomes they achieve.
- provide opportunities for *each* child to express their thoughts and feelings about experiences through a variety of methods.

# Social and Emotional Development

## Area 9

### 9.2 Self-Regulation

#### Standard

Children show increasing ability to regulate their behavior and express their emotions in appropriate ways.

#### Rationale

Young children learn to regulate their behavior under the guidance of caregivers (Shonkoff and Phillips, 2000). The expression of emotion in young children is linked to what they like and want, as well as to what they do not like and do not want (Wellman and Wooley, 1990). With the help of caregivers, they learn to express their emotions in words and actions that are socially appropriate. Culture influences how emotions develop and how they are displayed in boys and girls (Kitayama and Markus, 1994). Very young children show empathy when they display concern over the emotional expressions of peers. During early childhood, young children learn that everyone has emotions and that they can learn how to tell how others are feeling by observing their expressions of emotions (Hyson, 2003). They also learn that emotions occur in response to different situations and that emotions can be expressed in different ways. While young children's understanding of emotions may be restricted to "mad, sad, glad" at first, they gradually develop more differentiated understandings of emotions such as fear, surprise, disappointment, etc. Through caregiver modeling and feedback, young children learn how and when to express emotions (Thompson, 1991). Young children who are preferred as playmates tend to be those who recognize the emotions of others and who show their own emotions (Saarni, Mumme, and Campos, 1997).

#### Benchmarks

The child:

1. shows increasing capacity to monitor own behavior, following and contributing to classroom procedures. S
2. uses materials purposefully, safely, and respectfully. S
3. begins to accept consequences of own actions. C
4. manages transitions and changes to routines.
5. states feelings, needs, and opinions in difficult situations without harming self, others, or property. S

#### Examples of Benchmarks

Jason took the wagon from Maria. Maria screams and raises her hand, as if to hit. Caregiver: "Maria, tell Jason you don't like that." Maria: "I don't like that. It's my wagon." Jason continues to pull the wagon away. Caregiver: "Jason, Maria's talking to you. You need to listen. Tell him again, Maria." Maria: "That's my wagon and I want it back." Jason: "I want it." Maria: "You have to wait." Caregiver: "I know you want the wagon now, Jason, but you'll need to wait until Maria's done. What else would you like to play with while you wait?" Jason goes to the trikes. Julie knocks down Fela's block tower. Fela cries out. Julie: "It was an accident! An accident." Fela raises his hand, then drops it: "I hate you. That was mine." Caregiver: "I know you're really angry, Fela. You worked a long time on that tower." Julie: "It was an accident." Caregiver: "I know you didn't mean to knock it down, Julie, but Fela is still angry. He worked hard to build it." Julie: "I'm sorry, Fela. I will help you." Fela and Julie start to rebuild. Shamia and Tonya are sitting next to each other during group time. They talk to one another, giggle, and generally disrupt the group. After group time, the caregiver talks privately with the two girls. Caregiver: "When you sit together in group, I noticed you have a hard time paying attention and you make a lot of noise. The noise distracts the other children. What can we do so that you won't disrupt group time?" Tonya: "But she's my friend and I like to talk with her." Caregiver: "I know you're good friends. Is there another time that you could talk?" Tonya: "We can talk during free choice. We laugh." Caregiver: "So what can we do so that you can talk and laugh during free play but not during group time?" Shamia: "Maybe we shouldn't sit together at group." Caregiver: "What do you think, Tonya?" Tonya: "I guess." Caregiver: "Okay, let's try that and

we'll see how it works." At the next group time, the girls sit apart, pay attention, and do not disrupt the group time.

### **Caregiving Supports**

With preschoolers, caregivers:

- identify and explain group procedures while offering *each* child the opportunity to contribute to procedures and express thoughts, feelings, and ideas concerning them.
- assist *each* child in their feelings and the impact on others.
- model empathy and understanding.
- make *each* child aware of upcoming changes in schedule or routines.
- model self-control.
- give *each* child words to express emotions.

# Social and Emotional Development

## Area 9

### 9.3 Relationships with Caregivers

#### Standard

Children relate positively to caregivers who work with them.

#### Rationale

Young children's school success requires trusting relationships with familiar caregivers (Howes and Ritchie, 2002; Hyson, 2003). After developing close, affectionate relationships with their parent(s), children also develop close, affectionate relationships with other familiar and sensitive caregivers who have been nurturing and supportive to them (Sroufe, Fox, and Pancake, 1983). These bonds, referred to as *attachment*, form the basis for developing reciprocal social relationships with other caregivers and with peers (Thompson, 1998). To feel psychologically safe and free from anxiety, children must feel safe and comfortable with their caregivers.

#### Benchmarks

The child:

1. interacts comfortably with a range of familiar caregivers. GF, MC
2. accepts guidance, comfort, and directions from a range of familiar caregivers. GF, MC
3. shows trust in familiar caregivers.
4. seeks help as needed from familiar caregivers. C

#### Examples of Benchmarks

Craig has been wandering around with a downcast look. Caregiver goes to Craig and gets to his eye level. "How are you feeling, Craig?" Craig: "I'm sad." Caregiver: "The new baby is taking lots of Mom's time, isn't she?" Craig nods. Caregiver: "I've got a book about a boy like you. Shall we read *Peter's Chair*?" She holds out her hand. Craig takes her hand and smiles. They sit on the couch and look at the book together. Caregiver: "How does Peter feel, Craig?" Craig: "Left out." The caregiver puts her arm around Craig, who snuggles close to her. Kia comes into the classroom slowly. Her eyes are downcast and she takes long, deep sighs. Caregiver: "Kia, how are you feeling today?" Kia: "Grandma's in the hospital. I miss her." Caregiver: "It's hard for her to be gone." Kia: "I want her home." Caregiver rubs Kia's back. "You like spending time with Grandma, don't you?" Kia puts her arms around the caregiver and cries. "Yes, I want her home."

#### Caregiving Supports

With preschoolers, caregivers:

- ensure that a small number of educated, consistent, positive, and nurturing caregivers provide continuity of care and learning opportunities.
- intentionally spend time with *each* child, as well as with small groups of children, each day to support positive interactions and relationships.
- provide feedback that is warm, positive, and encouraging.
- show affection and caring to *each* child.

# Social and Emotional Development

## Area 9

### 9.4 Peer Interactions

#### Standard

Children develop the ability to interact with peers respectfully and to form positive peer relationships.

#### Rationale

Improvements in social skills and reduction in aggression are linked to increases in communication, perspective-taking, memory skills, and selfregulation (Coie and Dodge, 1997). Young children behave more positively and engage in more positive social exchanges with friends than with nonfriends (Gottman, 1983). Children who become friends initiate contact, sustain interactions, and resolve conflicts better than do children who do not become friends (Gottman, 1983). In contrast, poor peer relationships predict later peer rejection (Coie and Dodge, 1997). Poor peer relationships and peer rejection are associated with later problems in school and life, including social isolation, aggression, loneliness, social dissatisfaction, and low self-worth (Hymel, Rubin, Rowden, and LeMare, 1990), as well as low academic performance, school avoidance, truancy, and delinquency (Ladd, 1990; Parker and Asher, 1987). Physical aggression decreases in most children during the preschool years. In contrast, verbal aggression tends to increase, at least until four years of age (Cairns, 1979).

#### Benchmarks

The child:

1. sustains interactions with peers. GF, MC
2. develops friendships with other peers. G, C, GF, MC
3. negotiates with others to resolve disagreements. C, G
4. takes turns with others.

#### Examples of Benchmarks

Jacob and Kyler get out a board game. Jacob: "I go first." Kyler: "No, I do."

Jacob: "You always go first." Kyler: "No, I don't." Jacob: "Yes, you do."

Kyler: "I go first, or I won't invite you to my birthday party." Caregiver: "I see you're having a problem. If you don't decide soon, activity time will be over. You have about 10 more minutes to play." Jacob: "We could play two games, and we each get to go first." Kyler: "We could role the die to see who goes first."

Jacob: "Okay." Kyler goes to find the die. Dashari, Jenny, and Margo are in the dramatic play area.

Dashari: "I'm the mommy. I just got home from work." Jenny: "I'm the big sister. I'm cooking

dinner." Margo: "I'm the little sister and I just spilled my milk and you yell at me." Dashari: "YOU

SPILLED THE MILK!" Jenny: "It's okay. She can get a sponge and clean it up." Margo: "Okay."

#### Caregiving Supports

With preschoolers, caregivers:

- provide time, space, and sufficient materials for *each* child to interact with peers in common activities (blocks, dramatic play) for lengthy periods of time (60 minutes or more at a time).
- create situations in which *each* child needs to work with others to accomplish goals.
- encourage *each* child, coaching them as needed, to resolve conflicts, respect the rights of others, and reach joint decisions.
- point out and draw attention to different perspectives.

# Social and Emotional Development

## Area 9

### 9.5 Awareness of Community

#### Standard

Children have an increasing awareness of belonging to a family, community, culture, and program.

#### Rationale

All children live in some group or community. In order to function as a member of a community, children must learn to communicate, participate, and interact with other members of the group. This socialization process begins with the family and continues as the child moves in and out of social groups throughout life. Becoming a member of the group involves a series of changes, as the child negotiates his/her role in the group and resolves conflicts with other members of the group (Bugental and Goodnow, 1998).

#### Benchmarks

The child:

1. shows that he/she values others within the classroom/program, family, and community. G, C, MC, GF
2. shows early understanding of the concepts of justice, fairness, individual rights, and the welfare of the community and its members. G, C, S, MC, GF
3. shows responsibility as a member of a community. C, G
4. shows acceptance of persons from different cultures and ethnic groups. MC, G, GF

#### Examples of Benchmarks

The children have come in from outside. Natalie: "I never get a turn on a trike." Kareem had used one of the trikes. "We were pretending to be on the Tour de France. It's a really, really long bike race." Natalie: "It's not fair that you get the trikes so long and we don't get a turn." Caregiver: "What would be a fair rule, Natalie?" Natalie: "Everyone could get five minutes on a trike. We could use the timer like we do for the computers." Others shout: "Yeah!" Kareem: "But that's not fair. We can't do the Tour de France in five minutes! It's a long race." Others: "Yeah!" Caregiver: "Some children disagree with a five-minute limit. Any other solutions?" Marshall: "We could take turns and have a sign-up sheet like we do for cooking. You can ride as long as you want. But when someone signs up, you have to get off in five minutes." Caregiver: "We have two ideas. Everyone uses a timer and gets off in five minutes. Or you use the trike as long as you want, until someone signs up on the list. Then you have to get off in five minutes. How can we decide between the two ideas?" Emily: "We can vote." The caregiver puts two columns on a board, explains the choices, and asks each child to choose. Caregiver: "Marshall's idea got more votes. Let's try Marshall's idea for a few days and then we'll talk about how it's working."

#### Caregiving Supports

With preschoolers, caregivers:

- provide *each* child with opportunities to explore their communities.
- conduct group meetings where *each* child can participate in discussions of justice, fairness, the welfare of the community and its members, and individual rights in the meaningful context of daily experiences.
- ensure a classroom atmosphere of mutual respect.
- acquaint *each* child with various community helpers.
- give *each* child meaningful jobs in the classroom (watering plants, feeding animals, cleaning tables, etc.)
- provide materials such as photographs, books, posters, games, puzzles, foods, dolls, etc., that reflect *each* child's family, community, and world.

# Communication, Language, and Literacy

## Area 10

### 10.1 Language Understanding and Use

#### Standard

Children understand and use communication and language for a variety of purposes.

#### Rationale

Children understand and use communication and language for a variety of purposes. Communication occurs through both verbal and nonverbal means. Although most children move from non-verbal to verbal communication, some children need non-verbal communication aids, such as signing and writing boards. Vocabulary growth is rapid during the preschool years but varies widely among children of different cultural and economic backgrounds (Hart and Risley, 1995). At the same time, children increase their use and understanding of sentences with greater length and complexity. They also become increasingly able to use language appropriately and effectively in a variety of social contexts (Snow, Griffins, and Burns, 1998). During this development, caregivers help children become able to use language to discuss past events and absent objects. This skill, this decontextualized language, is linked to the development of reading (Neuman and Dickinson, 2001). Conversations that analyze the story-back-and-forth exchanges between caregivers and children during book reading—help children increase their vocabulary (Dickinson and Sprague, 2001). Dialogic storytelling (when the child is coached to become the story teller and to link the story to the child’s life) also appears to increase the child’s vocabulary.

#### Benchmarks

The child:

1. shows a steady increase in listening and speaking vocabulary. C
2. initiates, listens, and responds appropriately in conversations with peers and caregivers. C
3. speaks in sentences of increasing length and grammatical complexity.
4. follows simple oral directions that involve several actions. C, S
5. asks and answers a variety of question types. C

#### Examples of Benchmarks

Drew and his friends are eating lunch. Drew: “Teacher, my shirt is green like the peas.” Caregiver: “Yes, both your shirt and the peas are green. What else is green?” Drew: “Grass and snakes.”

Tamra: “Look, a gold button.” Caregiver: “It is big gold button, Tamra. We call this big, gold, shiny button a badge. The police officer wears a badge.” Tamra: “A gold badge.”

The caregiver made sandwiches from pita bread for snack. Caregiver: “What is different about this bread?”

Five-year-old Nelly: “The pita bread is like an envelope.” Maya: “This bread is different. There’s no crust.”

After snack, the caregiver reads the book *Bread, Bread, Bread* to the children.

While reading the book *Where’s Spot?*, the caregiver asks a variety of questions. “Did Spot have a good hiding place?” Andy: “No, he could have hid behind a bush.” After the story, the caregiver asks, “How do you think his mother felt when she found Spot?” Kere: “Happy. She was worried about him.”

Tamage, who has a hearing loss, is in the middle of the bike path. Jody is talking at Tamage’s back:

“Tamage, you’re in the way. Move.” Caregiver: “Remember, Jody, Tamage needs to see you in order to hear you.” Jody moves around so that she is facing Tamage and repeats her statement. Tamage gets off the path.

## Caregiving Supports

With preschoolers, caregivers:

- expand *each* child's comments.
- model new vocabulary and explain meaning of new words encountered (in conversations, books, songs, and rhymes).
- provide many opportunities to engage *each* child in conversations, using wait time (during share time, meal time, center time).
- provide children with opportunities to practice following simple directions (in games, group time, daily routines).
- get on children's eye level when speaking with them whenever possible.
- ask a variety of yes, no, wh-, and open-ended questions in conversations.
- use adaptive strategies and equipment (communication boards, computers, hearing aids, auditory trainers) to facilitate communication with children who have speech production difficulties.
- use materials and words in children's home language (in music, games, stories, etc.)

# Communication, Language, and Literacy

## Area 10

### 10.2 Early Literacy

#### Standard

Children engage in early reading experiences.

#### Rationale

Early, or emergent, literacy skills build on the child's language understanding and use. As young children develop language skills, they acquire the ability to think about language, talk about it, analyze its parts, and judge correct and incorrect forms. This thinking about language is referred to as *metalinguistic ability* and is related to early reading skills. Additional predictors of early reading include alphabet knowledge, phonological awareness, and emergent writing (Whitehurst and Lonigan, 2001). Phonological processing involves the sensitivity to, manipulation of, and use of sounds in word and requires understanding of the sounds of language. Phonological awareness includes recognizing and producing rhymes, segmenting words into syllables, and identifying words with the same beginning, middle, or ending sounds. Phonological awareness skills in preschool children are highly predictive of success in early reading skills (Cunningham, 1990; Whitehurst and Lonigan, 2001). In contrast, interventions that focus on teaching letter names do not appear to increase reading skills (Adams, 1990).

#### Benchmarks

The child:

1. shows an interest and enjoyment in listening to books and attempts to read familiar books.
2. displays book handling knowledge (turning the book right side up, using left to right sweep, turning one page at a time, recognizing familiar books by cover).
3. shows an awareness of environmental print. C
4. identifies some alphabet letters by their shapes, especially those in his/her own name.
5. recognizes the printed form of his/her name in a variety of contexts.
6. demonstrates comprehension of a book. C
7. demonstrates awareness that language is made up of words, parts of words, and sounds in words.

#### Examples of Benchmarks

The caregiver is reading *The Hungry Caterpillar* to the children. Before reading the book, the caregiver mentioned the title and author, Eric Carle. The caregiver reads the book, which the children have heard many times before. Caregiver: "And what do you think the caterpillar will look like after eating all those foods?" Lori: "He'll look REALLY big!" Caregiver: "Let's see what happens." She turns the page. Lori: "See? He IS big." After listening to the story, children use flannel cutouts to retell the story with the help of the caregiver. Caregiver: "I want everybody whose name starts with a \k\ sound to stand up." Chris, Candi, and Mark stand up." Caregiver: "I hear the \k\ sound starting Chris and Candi. But I hear the \k\ sound ENDING your name, Mark. So you sit down until you hear the \m\ sound that STARTS your name." Mark sits down. Caregiver: "Now I want everybody whose name STARTS with an \m\ sound to stand up." Mike, Mark, and Missy stand up. "Right. I hear the \m\ sound starting Mike, Mark, and Missy. Good listening." The children are singing the *Name Song*. When they get to Mary, they sing "Mary, marry, bo barry, banana-fana-fo fairy, me mi mo marry. Mary!" Rosita's mom, Consuelo, has tape-recorded some Spanish stories. Rosita brings the tape to the caregiver. Rosita: "Here are my mamma's stories." Caregiver: "Let's set up a listening center so we can listen to the stories together."

## Caregiving Supports

With preschoolers, caregivers:

- read a variety of materials (books, children's magazines, big books, variety of types of literature, signs, recipes) aloud many times during the day to *each* child individually and in small groups and large groups.
- ensure that *each* child has access to a variety of books, both fiction and non-fiction, throughout the day.
- display and draw attention to print sources in the environment (signs—exit, women, men, on, off).
- have *each* child's name and an alphabet chart displayed; draw attention to letters (children's names on their storage cubbies, name charts).
- give *each* child opportunities to talk about life experiences and opportunities to retell stories after listening to books (using storybook props).
- provide many opportunities for *each* child to hear, say, and sing rhymes in finger-plays, books, and songs.
- provide opportunities for *each* child to identify initial sounds in words (such as finding all the objects on a tray that start with the *b* sound).
- incorporates sounds and words from *each* child's home language in daily conversations and activities.

# Communication, Language, and Literacy

## Area 10

### 10.3 Early Writing

#### Standard

Children engage in early writing experiences.

#### Rationale

Young children attempt to write through scribbling, drawing, and through pictographs that may only have meaning to the child. Children may use letters, numbers, and letter-like forms in their writing attempts. Young children may use characteristics of the object in their early writing efforts. For example, the word *horse* may be bigger than the word *dog*. Young children may also use letters to represent syllables. The use of invented spellings, in which the child may use unusual representations (the first and last sounds to represent a word: BT for *boat*), is strongly related to reading and spelling skills in the early grades (Whitehurst and Lonigan, 2001).

#### Benchmarks

The child:

1. attempts to communicate with others using scribbles, shapes, pictures, and/or letters to write.
2. experiments with a variety of writing tools (pencils, crayons, brushes, chalk) and materials. C
3. tells others about intended meaning of drawings and writing.

#### Examples of Benchmarks

The children went to the post office. When they returned, many decided to send letters to their friends and parents. Some children chose to use pencils to write. Others used markers to draw while a caregiver writes a note about the drawing. Jessie is painting at the easel. Caregiver: “Do you want me to print your name on your picture, Jessie, or do you want to?” Jessie: “You do it.” Caregiver prints “J e s s i e.” Jessie looks at her name, picks up the pencil and the easel, and tries to copy it below. “J E S S I E” However, the S’s are reversed, and she puts the E below the I because she has run out of room.

#### Caregiving Supports

With preschoolers, caregivers:

- provide a variety of writing materials and encourage *each* child to participate in a variety of writing experiences (on an easel, chalkboard, sidewalk, paper on floor).
- incorporate writing materials into play settings (in dramatic play areas).
- model using writing for communication (writing thank-you notes following field trips).
- guide *each* child to hold and use writing tools, such as pencils, correctly.
- encourage *each* child to copy (but not trace) his/her name.
- provide adaptive writing tools and materials to aid *each* child with special needs.

# Mathematics and Science

## Area 11

### 11.1 Comparison and Number

#### Standard

Children understand amount, including use of numbers and counting.

#### Rationale

During the preschool years, children construct basic understandings of numbers and amount or “how many.” These understandings may differ from the understandings of older children and caregivers. Children initially build their understanding of amount through their hands-on actions with concrete objects. Children learn to count with understanding when they match the counting sequence, one-to-one, with a group of objects (National Council of Teachers of Mathematics, NCTM, 2000). After repeated experiences with small quantities of objects, they construct an understanding of discrete numbers. When caregivers help children link their understandings of objects with conventional numerals (2, 3), children advance their understanding to deal with larger quantities (Mix, Huttenlocher, and Levine, 2002). Counting from the first number, and counting on from one number to another, provides the basis for later skills in formal addition (Fuson and Fuson, 1992).

#### Benchmarks

The child:

1. shows recognition and naming of numerals (1, 2, 3).
2. counts objects, matching numbers one-to-one with objects.
3. uses language such as *more* or *less* to compare quantities.

#### Examples of Benchmarks

Amy, Tricia, and Alex are playing in the dramatic play area; Nadia joins them. Amy: “You can’t play here now, Nadia—only three can be here.” She points to the sign in the interest center with the numeral 3 and three stick figures [3 ♀ ♀ ♀] and then points to each of the three children in the area.

“One, two, three—that’s us. You’re four. You have to wait.” Nadia goes to the block area. Jorge and Damon are playing a board game. Jorge rolls a die and counts with his finger: “One, two, three.” He moves his marker three spaces.

#### Caregiving Supports

With preschoolers, caregivers:

- use counting finger-plays, books, and number rhymes repeatedly.
- post numerals (1, 2, 3) and icons (simple pictures) in the room to indicate group size limits for each learning center.
- use daily routine activities (such as setting the table) to incorporate meaningful experiences involving counting and one-to-one correspondence.
- make available daily puzzles and manipulative materials that link numerals to pictures to represent quantity.
- provide cooking activities with recipes that link numerals to pictured objects.

# Mathematics and Science

## Area 11

### 11.2 Patterns

#### Standard

Children understand patterns.

#### Rationale

Mathematics is the language and science of patterns (Copley, 1999). Patterns involve part-whole relationships, including the relationships among parts. Children learn patterns involving numbers, shapes, measuring, and data analysis (Copley, 2000). Recognizing patterns helps children organize their world and facilitate problem solving. Working with patterns and recognizing patterns helps children see relationships make predictions. Pattern recognition is an important precursor to algebraic understanding (NCTM, 2000). Seriation, or organizing into a sequence, is one pattern. Children learn the ordinal numbers (first, second, third, ... last) to describe the members of a sequence of objects or events.

#### Benchmarks

The child:

1. shows skills in recognizing and creating some patterns.
2. predicts what comes next in a pattern.

#### Examples of Benchmarks

Ryan is stringing beads. He talks to himself while stringing: “First comes red, then white, then red, then red.” Caregiver: “You have a pattern there, Ryan.” Ryan: “Yep. It’s red, white, red—just like the flag.” Caregiver: “You have the same colors as the American flag: first red, next white. What’s the last color you’ll use?” Ryan: “Red; the flag starts and ends with red.”

#### Caregiving Supports

With preschoolers, caregivers:

- provide a variety of materials related to patterns, such as puzzles, stringing beads.
- use, and encourage *each* child to use, series words (such as first, second, third, last) to describe *each* child’s experiences.
- encourage *each* child to make predictions in patterns, measurement, and data analysis.

# Mathematics and Science

## Area 11

### *11.3 Shapes and Spatial Relationships*

#### **Standard**

Children understand shapes and spatial relationships.

#### **Rationale**

Spatial relationships involve ideas related to position (on, under, next to), direction, and distance (near, far, next to, close to) of objects in space. Recognizing shapes is the beginning of geometric understanding. Children construct their understanding of space from actively manipulating their own spatial environment (Clements and Battista, 1992). The understanding of shapes requires children to actively manipulate shapes and to explore the characteristics and parts of shapes, rather than simply seeing and naming them (Clements, 2003). Children's concepts of shape may differ from mathematical concepts (children may limit triangles to only equilateral triangles, or not classify squares as rectangles). Caregiver instruction is needed to help children progress from recognizing shapes to understanding the characteristics of shapes. Spatial visualization involves seeing an object from different perspectives and both building and changing mental representations of both two- and three-dimensional objects (Clements and Sarama, 2004). Through geometric modeling and spatial reasoning, children learn to describe their physical environment and to build problem-solving skills (NCTM, 2000).

#### **Benchmarks**

The child:

1. demonstrates understanding of spatial words such as up, down, over, under, top, bottom, inside, outside, in front, and behind.
2. shows more recognition for some simple shapes.
3. notices similarities and differences among shapes.
4. notices how shapes fit together to form other shapes.

#### **Examples of Benchmarks**

The caregiver reads a book on shapes to the children. Katy: "I know where there is a triangle outside." Caregiver: "Where?" Katy: "On the roof." Caregiver: "Let's look for it when we're outside." While they are outside, several children look for Katy's triangle. "Is this it?" Katy: "No." Finally, she points the children to the gable on the roof. "There's my triangle." Caregiver: "Are there other triangles outside?" The children look around and begin to find other triangles.

#### **Caregiving Supports**

With preschoolers, caregivers:

- provide a variety of books, materials, and experiences related to shapes and spatial reasoning, such as blocks, shape templates.
- use shape and spatial words to describe the environment.

# Mathematics and Science

## Area 11

### 11.4 Scientific Reasoning

#### Standard

Children observe, describe, and predict the world around them.

#### Rationale

Learning science is an active process; science is inquiry-based (National Research Council, 1996). Young children need to acquire the tools of science, rather than scientific knowledge, which will change considerably by the time they reach adulthood. Science-process skills permit children to process new experiences through their senses. Children observe, compare, classify, measure, and communicate their observations of events and objects (Charlesworth and Lind, 1999). They explore earth science, physical science, and life science as they observe and manipulate concrete objects. They infer, drawing more meaning than what is visible, and predict future events. They describe those events and compare their predictions with their observations (Piaget, 1980).

#### Benchmarks

The child:

1. shows curiosity about living and non-living things.
2. notices, describes, and predicts changes in the environment.
3. shows respect for living things.

#### Examples of Benchmarks

Each child has planted a bean seed in a small paper cup, watered the soil, and placed it in a sunny window. Each day, the caregiver reminded the children to water their seeds with just a little water. Some children put lots of water on the seeds; some were absent and did not water the seeds.

After a few weeks, the caregiver says: “Look at the seeds. I wonder why some of them did not grow.” Gina: “Monika never watered hers.” Monika: “I watered it when I planted it, but then I was sick and didn’t come.” Caregiver: “I wonder if the seed needed more water than that.” Ivan: “I watered mine every day—look—it’s really wet—like mud—and mine didn’t grow.” Caregiver: “I wonder if the seed needs less water than that.” David: “I watered mine just a little bit every day. Mine’s big.” Caregiver: “Do some of you want to try growing seeds again?” Children: “Yes.” Monika: “I want two seeds so I can water one and not the other.” Caregiver: “That’s an idea. Anyone who wants to try Monika’s plan can have two seeds. Monika, how will you keep track of which seed you will water and which seed you will not water?” Monika: “I’ll write ‘NO’ on one cup.” Roberta is using pipe cleaners to make a bubble wand at the science center, which has a large, shallow container with soap solution. She shapes the pipe cleaners into a square and dips the wand into the bubble solution. She blows, frowns, adjusts her wand, and frowns again. Caregiver: “You look frustrated, Roberta.” Roberta: “I’m trying to blow a square bubble, but it keeps coming out round.” Caregiver: “I wonder why?” Roberta: “I think it’s too bendy.” Caregiver: “What are you going to do about that?” Roberta: “I don’t know. I want it to be square and not to bend.” Caregiver: “Let me know if you need help.”

#### Caregiving Supports

With preschoolers, caregivers:

- provide a variety of natural experiences that encourage *each* child to explore, describe, and classify.
- encourage *each* child to observe patterns and to make predictions.
- encourage *each* child to compare their predictions with what they see.

# Mathematics and Science

## Area 11

### *11.5 Scientific Problem Solving*

#### **Standard**

Children apply and adapt strategies to solve problems.

#### **Rationale**

Problem solving is finding a way to solve a problem that is not immediately evident or reachable. Problem solving is a basic characteristic of mathematical and scientific thinking as well as a major way to develop both mathematical and scientific knowledge (NCTM, 2000). Problem solving is learned through daily living experiences, including those involving science and math (NCTM, 2000). Children need time to think about problems; they need permission to make mistakes, and they need encouragement to try a variety of strategies (Charlesworth and Lind, 1999). Caregivers need to encourage children to ask questions.

#### **Benchmarks**

The child:

1. uses his/her senses and variety of strategies to solve problems.
2. invents strategies to figure out answers to problems.
3. when unsuccessful at solving problems, experiments and adapts strategies.

#### **Examples of Benchmarks**

There are magnets on the science table, together with a variety of small metal, plastic, and wooden objects. Kwang touches the magnet to the paper clips, the stapler, the pencil, the penny, and the plastic ruler. Caregiver: "Looks like the magnet sticks to some things but not others?" Kwang: "Yes; it sticks to the paper clips but not to the pencil, the penny, or the ruler." Caregiver: "What else do you think it will stick to in the room?" Kwang: "I think it will stick to the table legs." She reaches down and puts the magnet on the leg. Kwang: "See, it sticks. It won't stick to the easel." She puts the magnet on the easel; it falls off. Caregiver: "What happened?" Kwang: "It fell off. It didn't stick."

#### **Caregiving Supports**

With preschoolers, caregivers:

- model a variety of problem solving strategies.
- provide time and situations that allow *each* child to problem solve.
- encourage *each* child to use problem solving strategies.
- use adaptive devices as needed to help *each* child participate.

# Mathematics and Science

## Area 11

### *11.6 Measurement*

#### **Standard**

Children understand comparisons and measurement.

#### **Rationale**

Children organize their experiences through sorting and classifying. Learning language names helps children match and compare, possibly because the words help children focus their attention and note similarities (Sandhoffer and Smith, 1999). Making comparisons and noting similarities and differences provides a basis for making patterns and generalizations. Exploring graphs provides a basis for later understanding of data analysis and probability. Measurement, which provides a basis for comparison, provides one of the most widely used applications of mathematics (NCTM, 2000). Children begin to understand measurement by comparing the size of objects. Young children explore measurement concepts but do not master accurate measurement skills with standard units or comparative (transitive) measurement judgments. Children need direct, hands-on experiences with objects while they use language to describe relationships involving size.

#### **Benchmarks**

The child:

1. sorts, classifies, and puts objects in series, using a variety of properties.
2. makes comparisons among several objects based on one or more attributes (length, size, weight) and using words such as shorter, taller, bigger, smaller, heavier, lighter.

#### **Examples of Benchmarks**

Jeffrey and Miguel are sitting at snack with their graham crackers. Miguel breaks his cracker in half. “Now I’ve got more than you—you’ve got one and I’ve got two.” Jeffrey breaks his cracker into many small pieces. “Now I’ve got more—I’ve got lots.” Caregiver: “Tell me how they’re different.” Jeffrey: “I’ve got more.” Miguel: “But mine are bigger.” Brittany and Kyung are each building a tower with unit blocks. Brittany: “Mine’s taller than yours.” Kyung adds a block. “Now mine’s taller.” Brittany adds a block but her tower collapses, taking Kyung’s down also. Brittany: “Let’s build towers that are the same!” They start to build their separate towers, matching block for block. The caregiver has written “How many people are in your family?” on the board, with columns for 2, 3, 4, 5, 6, and More than 6. During writing time, each child draws a picture of all the people in his/her family, counts them (with help), and places her name card in the column under the corresponding number for his/her family. During group time, the caregiver asks: “What can we tell about our families from the chart?” Jan: “Lots of names are under the 3.” Jason: “My name is under the 4; so is Teddy’s.” Camara: “Mine is the only card under the last one.” Caregiver: “Which one has the most names?” Jan: “3—look how many: 1... 2... 3... 4... 5... 6. There are six names under 3.” Caregiver: “So six children here have families with three people in them.”

#### **Caregiving Supports**

With preschoolers, caregivers:

- model the use of language involving comparisons, such as more, less, and same.
- provide objects and materials for *each* child to compare and measure.
- display information in graphical form so that *each* child can compare activities and experiences (Charlesworth and Lind, 1999).

# Creative Arts

## Area 12

### 12.1 Art

#### Standard

Children explore art through a variety of media.

#### Rationale

Through repeated experiences, young children gain skills in using a variety of media or materials for art, such as drawing materials, clay or dough, paint, and markers. Young children move from scribbling, exploring the properties of the media, to more representational efforts (Kellogg, 1967). Through the arts, children learn to communicate their ideas and experiences while they make choices, gain motor coordination, and explore the physical properties of media (Althouse, Johnson, and Mitchell, 2003). As children work through their plans to build a structure from blocks or paint a picture, they build their cognitive skills (Seefeldt, 1995).

#### Benchmarks

The child:

1. uses a variety of two- and three-dimensional media (drawing materials, paint, clay, wood, markers) to create original works, form, and meaning. C
2. expresses ideas about own artwork and artwork of others, relating artwork to what is happening in the environment, life, classroom, etc. G, C

#### Examples of Benchmarks

Keith dips a brush into yellow paint on the easel. He moves the brush across the paper up and down, then side to side. He dips the other brush in blue paint and paints large slashes back and forth. Caregiver: “Tell me about your painting, Keith.” Keith: “I used lots of yellow and blue.” Pointing to a green triangular shape, Keith says: “Hey look—there’s a Christmas tree!” Caregiver: “I see the tree, too—and it is green, like a Christmas tree.”

#### Caregiving Supports

With preschoolers, caregivers:

- provide a variety of art materials in the environment, some of which are available and accessible to *each* child each day for long periods of self-selection time.
- encourage *each* child to express their own ideas in their artwork without providing models, directions, or pre-made components.
- display a variety of artwork, primarily *each* child’s work, at their eye level.
- provide a supportive atmosphere where *each* child is encouraged to share their art experiences.

# Creative Arts

## Area 12

### *12.2 Music, Rhythm, and Movement*

#### **Standard**

Children participate in a variety of music and movement experiences.

#### **Rationale**

Aristotle is said to have asked, “What we must first seek to answer is whether music is to be placed in education or not, and what power it has...whether as education, play, or pastime” (Scripp, 2002). Although debate still continues on this issue, a large body of research supports that children learn in and through music. Musical activities such as singing, dancing or rhythmic movement, and playing or listening to music can be a catalyst to further education in a variety of areas, including spatial-temporal reasoning (Rauscher, Shaw, Levine, Wright, Dennis, and Newcomb, 1997). In addition, music can be a tool to promote social-emotional development, including self-regulation (Scripp, 2002).

#### **Benchmarks**

The child:

1. participates in a variety of musical and rhythmic experiences, including singing, listening, and finger-plays. MC
2. notices differences in pitch, tempo, dynamics, and timbre. MC

#### **Examples of Benchmarks**

Stacey is listening to a rhythmic song on the portable CD player. She picks up some scarves nearby and begins to move to the music. Caregiver: “What does the music make you want to do?” Stacey: “I’m flying.” Caregiver: “You’re using your arms to fly. Tell me more about the music.” Stacy: “It makes me fly fast.” Caregiver: “It does have a fast tempo, doesn’t it?” The children are singing, “I see a rabbit....” Caregiver: “What other animal can we sing about?” Abdul: “An elephant.” Caregiver and children sing: “I see an elephant.”

Children are using maracas they made and singing a song about rain. Caregiver: “Now it’s raining just a little bit, just a sprinkle. What will it sound like?” Children play the maracas very softly. Caregiver: “Now it’s beginning to rain a little bit harder.” Children play louder. Caregiver: “Now it’s raining very hard!” Children play very loudly. Caregiver: “Now the rain is slowing.” Children begin to play more softly again.

#### **Caregiving Supports**

With preschoolers, caregivers:

- provide a variety of music materials, some of which are available and accessible to *each* child each day for long periods of self-selection time.
- model and encourage *each* child to express themselves through music-related activities.
- incorporate various forms of music and movement into circle or group time.
- adapt activities and materials as needed to involve *each* child with disabilities in music and movement activities.

# Creative Arts

## Area 12

### *12.3 Dramatic Play*

#### **Standard**

Children engage in dramatic play experiences.

#### **Rationale**

Sociodramatic play (Howes, 1992) helps children learn to communicate, control and compromise, and explore intimacy and trust. In sociodramatic play, children assume different roles from their experiences and use their understandings to act out a variety of emotions and social relationships.

Children who engage in dramatic play typically show more advanced skills in seeing the perspectives of others and in getting along with peers. (Garvey, 1990).

#### **Benchmarks**

The child:

1. shows creativity and imagination to use materials and assume different roles in dramatic play situations.

MC, C, GF

2. interacts with peers in dramatic play activities that become more extended and complex. MC, C, GF

#### **Examples of Benchmarks**

Kegan, Hunter, and Diego are in the dramatic play corner. They put on the firefighter hats and yellow slickers and aim a short hose at the playhouse. Diego: "We need lots of water to put out the fire." Hunter: "We can throw buckets of water at the fire, too." They start throwing buckets of pretend water at the playhouse. Jessica watches nearby. Caregiver: "Jessica, do you want to help the firefighters?" Jessica nods. Caregiver: "Tell them you want to help fight the fire." Jessica: "I want to fire fight." Kegan: "You could drive the firetruck." Jessica runs to put on a hat and yellow slicker and gets behind the large steering wheel.

#### **Caregiving Supports**

With preschoolers, caregivers:

- provide an environment with sufficient space, time, props, and materials for *each* child to interact with peers, trying on and carrying out different roles, both familiar and unfamiliar.
- encourage *each* child, coaching as needed, to interact with peers in dramatic play activities.