

Materials and Activities to Support Cognitive Development

Adapted from Child Care Aware of North Dakota (2017) and the Family Child Care Environment Rating Scale (2007)

Aspects emphasized in the Family Child Care Environment Rating Scale (2007) (items aligned to cognitive development)	Why is this important?	How I support children’s cognitive development in this area
<p style="text-align: center;">Math</p> <p>Infants and toddlers: Rattles, cradle gym with hanging shapes, number and shape board books, simple puzzles, shape sorters, toy phone, nesting cups, stacking rings</p> <p>Preschool: Objects to count, loose parts, rulers, tape measure, magnetic numbers, number games, playing cards, books with shapes and numbers, geometric shapes, math games and software, blocks, Legos, interlocking puzzles</p> <p>School age: Videos about math, calculator, board games with dice, math games and software, math manipulatives, jigsaw puzzles</p>	<p>The materials should be interesting and developmentally appropriate so the children can and want to engage with the materials without too much frustration.</p> <p>Linking language about math, shapes, and numbers throughout the day during practical experiences and encouraging children to create patterns with counters, graphing, weighing, making charts, measuring, introduces them to critical early math concepts and vocabulary.</p>	

<p style="text-align: center;">Science</p> <p>Infants-toddlers: Board books with pictures of animals, trees, plants, flowers</p> <p>Preschool: Planters, seeds, sand, posters of trees, flowers, realistic pictures of animals, balance scale, rocks, sea shells, magnifying glass, prisms, magnets</p> <p>School age: Videos of nature, experiments, weather books, fiction and nonfiction books about birds, insects, and plants</p>	<p>Children need to experiment and explore science materials to learn about the world. Hands-on learning with natural materials should be part of each day. Outdoor walks, and pointing out grass, birds, seeds, trees, animals, insects, dirt, rocks, sun, rain, and snow make science a part of the child's daily life. Caregivers can expand on children's comments and experiences.</p>	
<p style="text-align: center;">Language and Literacy</p> <p>Provider generally responds (75 percent of the time) in a timely and positive manner to children's attempts to communicate.</p> <ul style="list-style-type: none"> • Crying is answered quickly. • Children's verbal requests are attended to. • Provider responds with interest to children's communication during verbal play. • Negative responses to children are avoided.. <p>Provider has many turn-taking conversations with children.</p> <ul style="list-style-type: none"> • Back and forth baby conversation • Repeating what toddler says and then waiting for a response • Discussing ideas with older children 	<p>A timely response by the provider to meet the needs expressed by children encourages children to use language because they see it brings results.</p> <p>Engaging infants and toddlers in conversation gives them the experience of taking turns to vocalize and to listen to someone else's vocalization.</p> <p>Having books available during transition times helps limit the amount of time a child has to wait (for snack, lunch, outdoor time)</p>	

<p>At least twelve books for each age group (but no less than two for each child in each age group) are accessible much of the day.</p> <p>Books contain a wide selection of topics, people, and settings, including familiar objects, routines, realistic depictions of animals, and people of different races, ages, gender, cultures, and abilities.</p> <p>Provider reads books with individuals and very small groups each day.</p>	<p>while providing additional resources for them to learn about language and the world around them.</p>	
<p style="text-align: center;">Art and Sensory</p> <ul style="list-style-type: none"> • Toddlers (12 to 30 months) are offered different art materials at least three times a week. • Preschoolers and older children have drawing materials accessible for much of the day. • Preschoolers and older children have a variety of different art materials accessible daily. <p>Children should be allowed to show individual expression, selecting the topic or art medium to use. They should not be asked to copy an example or use color sheets.</p>	<p>Early experiences with art can provide opportunities to practice eye-hand coordination. Simple art materials, such as crayons and paper, give toddlers opportunities to use their hands and arms in new ways.</p> <p>Expecting young children to participate in a large-group art activity or to follow adult-created examples is not appropriate. Young children are more interested in the process of creating rather than in an end product.</p> <p>Young children need adult supervision using sensory and art materials.</p>	