



## Nature/Science

ECERS-R Indicator	Why is this important?
<ul style="list-style-type: none"> <li>Nature/science toys should be accessible to children at least 1 hour a day. Posters, pictures, and photos must be placed where the children can easily see them.</li> </ul> <p>Definition: <b>Accessible</b> – children don't have to ask the teacher to get/open materials.</p>	<ul style="list-style-type: none"> <li>Children learn about nature from pictures, toys, poster, books, etc. By offering these toys, children are able to see and explore different nature/science activities.</li> </ul>
<ul style="list-style-type: none"> <li>At least 3-5 examples of three categories of nature/science materials are accessible daily for a substantial portion of the day.. The 4 categories are: <i>collection of living things</i> (pinecones, bird nest, rocks, sea shells), <i>pictures, books, games or toys</i> (realistic representation), <i>living things</i> (cat, dog, garden), <i>tools</i> (magnets, magnifying glass, prisms)</li> </ul> <p>Definition: <b>Substantial portion of the day</b> – One-third of the program's daily operating hours. Operating hours begin with the earliest time children are allowed to arrive and continue until the latest time children are allowed to stay in care.</p>	<ul style="list-style-type: none"> <li>By offering a wide variety of science materials children will learn more about the world around them. Children need to experience science through experimentation and hands on learning.</li> <li>Children need to see realistic accurate pictures of what animals around them look like. They will not associate a cartoon cow with a real one because they don't look like the real thing..</li> </ul>
<ul style="list-style-type: none"> <li>Nature/science toys are organized and in good repair.               <ul style="list-style-type: none"> <li>Toys and materials should be in good condition and not broken, torn, missing pages or covers and complete with all pieces.</li> <li>Animal cages/aquariums cleaned.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Materials should be organized and grouped by type so children know where to find them. By having a well-organized area, children won't be frustrated. Children are more likely to play with the materials if it is easy to find all the pieces or turn the pages in the book.</li> </ul>
<ul style="list-style-type: none"> <li>Everyday events can be used as a basis for talking about nature/science.               <ul style="list-style-type: none"> <li>Pointing out insects, blowing bubbles, watching rain/snow.</li> <li>One example must be observed during observation.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Teachers should point out or draw attention to natural occurrences they experience with nature and science. When teachers expand on what the child is experiencing by talking about it (You are squinting because the sun is bright today), you are allowing them to learn about the many wonders of nature and science that are part of their everyday world.</li> </ul>

<ul style="list-style-type: none"> <li>• Children should experience natural objects either indoors or outdoors more than once daily.             <ul style="list-style-type: none"> <li>○ Living plant or animal in classroom to look at.</li> <li>○ Field trips to zoo/aquarium.</li> <li>○ Staff point out flowers, trees, birds from window.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Children learn about nature through a variety of activities. By having a classroom pet, the children are learning how to care for it and watch it grow and develop. By allowing children to help feed fish or water plants, it teaches them responsibility for other living things.</li> </ul>
<ul style="list-style-type: none"> <li>• Children should go outdoors at least twice a week (weather permitting) where providers point out nature.             <ul style="list-style-type: none"> <li>○ There will be relatively few days in most areas when children will not be able to go outdoors at all.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The best way for children to learn about nature is to experience it first-hand! By going outside, children are exposed to grass, trees, birds, animals, insects, dirt, rocks, wind, sun, snow, etc.</li> </ul>
<ul style="list-style-type: none"> <li>• Nature/science activities requiring more input from staff are offered at least once every 2 weeks (cooking, simple experiments like measuring rainfall, field trips).</li> </ul>	<ul style="list-style-type: none"> <li>• Children learn more when adults are actively engaged with them. Some activities (such as cooking which requires following a recipe and measuring) requires additional supervision and direction from a teacher in order to be successful. These activities help build future math and deductive reasoning skills.</li> </ul>
<ul style="list-style-type: none"> <li>• Books, pictures, and/or audio/visual materials used to add information and extend children’s hands-on experiences.</li> </ul>	<ul style="list-style-type: none"> <li>• Ex: If children are waiting for eggs in their classroom to hatch, by showing a video about how chicks hatch and offering books and pictures/posters detailing the process, children will be more actively engaged and will learn more about the process. Adding these additional materials to their hands-on experiences adds a richness and depth to the overall experience.</li> </ul>

\*All About ECERS-R by Debbie Cryer, Thelma Harms and Cathy Riley

SOURCE: *Early Childhood Environment Rating Scale (ECERS)*

