



## Science

**Scientific Inquiry**  
(skills and language related to science)

- 1.0 Observation and Investigation
- 2.0 Documentation and Communication

**Physical Sciences**

- 1.0 Properties and Characteristics of Nonliving Objects and Materials
- 2.0 Changes in Nonliving Objects and Materials

Science: Learning Experience 3

<http://www.wested.org/facultyinitiative/>

2

# Science

## Life Sciences

1.0 Properties and Characteristics of Living Things

2.0 Changes in Living Things

## Earth Sciences

1.0 Properties and Characteristics of Earth Materials and Objects

2.0 Changes in the Earth

Science: Learning Experience 3 <http://www.wested.org/facultyinitiative/> 3

# Science

## Life Sciences

### 1.0 Properties and Characteristics of Living Things

At around 48 months of age	At around 60 months of age
<p><b>1.1</b> Identify characteristics of a variety of animals and plants, including appearance (inside and outside) and behavior, and begin to categorize them.</p>	<p><b>1.1</b> Identify characteristics of a greater variety of animals and plants and demonstrate an increased ability to categorize them.</p>
<p><b>Examples</b></p> <ul style="list-style-type: none"> <li>• After cutting open a variety of fruits and discovering seeds inside, begins to recognize that fruits have seeds. When asked to predict what is inside an apricot, a child points to a seed and says "seed."</li> <li>• Observes a squirrel climbing up the tree and notices that it has a long tail.</li> <li>• On a nature walk in the neighborhood or schoolyard, identifies short plants and tall plants. A child who is an English learner points to or indicates a eucalyptus tree nearby and communicates, "Big tree."</li> </ul>	<p><b>Examples</b></p> <ul style="list-style-type: none"> <li>• Sorts fruits, such as mangoes, avocados, apples, grapes, peaches, and apricots, based on whether they have one seed or many seeds inside. Points to the avocado and apricot and says in the home language, "Look! They both have one big seed."</li> <li>• During circle time, shares that one night they saw opossums in their yard.</li> <li>• Observes and identifies the characteristics of a ladybug (e.g., its shape, size, colors, and how it moves) and shares observations with others when prompted by the teacher: "The ladybug is round and has tiny legs. It has black dots."</li> </ul>

Science: Learning Experience 3 <http://www.wested.org/facultyinitiative/> 4

## Science

### **Completing the puzzle:**

- Assemble the pieces to show the organizational structure of the domain
  - ✓ Identify the 4 strands
  - ✓ Place appropriate substrands and foundations under each strand
  - ✓ Consider whether each foundation describes what children know or can do at around 48 or 60 months of age

Science: Learning Experience 3

<http://www.wested.org/facultyinitiative/>

5

## Science

- What pattern do you notice between the foundations for the two age groups?
- How would you decide if a child has acquired the skills and knowledge for the foundation at the 48-month age level or the 60-month age level? What information about the child would you need?

Science: Learning Experience 3

<http://www.wested.org/facultyinitiative/>

6

## Science



- What stands out for you?
- Which specific foundations were easier to place? Which ones were more challenging? Why?
- What are some examples you have seen of these foundations?
- Which strand is the least familiar to you? How could you learn more about that strand?