

## COG: SCI 2: Inquiry Through Observation and Investigation

Child observes and investigates objects (living and nonliving things) and events in the environment and becomes increasingly sophisticated in pursuing knowledge about them



**Mark the latest developmental level the child has mastered:**

Building			Integrating		
Earlier <input type="radio"/>	Middle <input type="radio"/>	Later <input type="radio"/>	Earlier <input type="radio"/>	Middle <input type="radio"/>	Later <input type="radio"/>
<p><b>Engages in sustained explorations</b></p>	<p><b>Observes objects and events of interest in the environment, makes simple predictions about them, and checks the predictions</b></p>	<p><b>Engages in detailed observations and complex investigations of objects and events in the environment (e.g., tests predictions, makes comparisons, uses scientific tools, or tracks changes over time)</b></p>	<p><b>Contributes to planning and carries out detailed observations and complex investigations to answer questions of interest</b></p>	<p><b>Uses information from resources (e.g., print or digital) to expand on observations and investigations to answer specific questions of interest on scientific topics</b></p>	<p><b>Conducts systematic observations and investigations to collect data that provide evidence to answer specific questions on scientific topics</b></p>
<p><b>Examples</b></p> <ul style="list-style-type: none"> <li>▶ Watches a new fish in the tank closely for several minutes, then calls a peer over to watch the fish, too.</li> <li>▶ Notices a drooping plant and comments, "How can we make it better?" and tries different ways to support it, such as holding it or leaning it against something.</li> <li>▶ Observes a squirrel outside for awhile, and then asks, "Where did it go?" after the squirrel went up a tree.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Indicates that a "roly- poly" bug will roll up into a ball if touched, and then checks by touching it.</li> <li>▶ Communicates that when you add water to flour, that the flour will be sticky, during a small group activity led by an adult.</li> <li>▶ Predicts that paint will turn purple while watching an adult mix together blue and red paint.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Predicts that a rock is heavier than a shell, and then uses a balance scale to show that the rock is heavier.</li> <li>▶ Communicates that a tennis ball will go down the ramp faster than a plastic ball, but more slowly than a golf ball, and then rolls the balls several times to see which reaches the bottom first.</li> <li>▶ Participates in making a chart of how much the temperature changed each day, during a small group activity led by an adult.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Asks an adult, "How do you know if a fruit is really a fruit?" After adult responds that fruit have seeds, plans with adult to open up several different types of fruits to see if they all have seeds.</li> <li>▶ Participates in making a chart to compare change, over time, in the growth of bean plants, and communicates, "I think this bean plant grew taller because it got more sun next to the window."</li> <li>▶ Participates in setting up a chart to observe how long it will take for a silkworm to create a cocoon and turn into a butterfly.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Measures the height of bean plants, and then finds a book to see how tall the bean plants will grow.</li> <li>▶ Participates in observing and recording the growth and change of silk worms in the classroom, and compares observations to printed or digital images of stages in the life cycle of silk worms.</li> <li>▶ Observes and records on a calendar the number of days it snowed within the last two weeks and uses the internet to see what other parts of the country had snow at the same time.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Places different materials (i.e., wax paper, cardboard, clear plastic) in front of a beam of light and records the level of transparency (e.g., block all of the light, blocks some of the light, or allows the light to pass through).</li> <li>▶ Records how the sun appears to move by observing sunny areas of the yard in the morning, noon, and afternoon and then predicts how the sun will move across the sky the next day.</li> <li>▶ Determines how much the temperature changes throughout the day by observing and recording the temperature on the thermometer at the beginning, middle, and end of the day.</li> </ul>

- Child is emerging to the next developmental level
- If you are unable to rate this measure, explain here:

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**COG: SCI 2 (of 4)**