

Science (SCI)

Cause and Effect 1

1 Cause and Effect 1

Child develops increasing ability to observe, anticipate, and reason about the cause-and-effect relationships between actions and events

Responding

- E Responds or shows anticipatory excitement to people, objects, or actions **EARLIER**
- L Repeats the same action with the same objects or people that produced an effect **LATER**

Exploring

- E Repeats the same action with different objects or people **EARLIER**
- L Explores possible causes of actions or events **LATER**

Building

- E Acts on objects based on their features **EARLIER**
- M Shows anticipation of effects of actions or events **MIDDLE**
- L Offers possible explanations for why certain actions or behaviors result in specific effects **LATER**

Integrating

- E Shows understanding that variations in actions or degrees of actions with the same objects or materials cause different results **EARLIER**
- M Shows understanding that effects may arise from causes that are not easily perceived **MIDDLE**
- L Applies understanding of cause-and-effect relationships to plan investigations and draw conclusions about causes of observable events **LATER**

Inquiry Through Observation and Investigation 2

2 Inquiry Through Observation and Investigation 2

Child develops increasing ability to carry out observations, explorations, and investigations in the environment

Responding

- E Responds to people, things, or sounds **EARLIER**
- L Shows interest in people or things in the environment **LATER**

Exploring

- E** Attends to responses of objects or people that result from own actions **EARLIER**
- L** Engages in simple, purposeful explorations of familiar objects in the environment **LATER**

Building

- E** Engages in extended explorations of objects and events in the environment **EARLIER**
- M** Makes simple predictions about objects and events of interest in the environment **MIDDLE**
- L** Carries out an exploration or investigation to check predictions and test out solutions **LATER**

Integrating

- E** Identifies information, gathered from an exploration or investigation, that is relevant to answering questions **EARLIER**
 - M** Generates new questions based on information gathered and findings of explorations or investigations **MIDDLE**
 - L** Plans and carries out systematic explorations or investigations to collect data that will provide evidence relevant to specific questions **LATER**
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Documentation and Communication of Inquiry ³

3 Documentation and Communication of Inquiry ³

Child develops increasing capacity to describe, record, and communicate about their observations and investigations

Exploring

- E** Identifies objects or actions in the environment **EARLIER**
- L** Communicates about characteristics (e.g., color, size, texture) of an object or action **LATER**

Building

- E** Notices differences in characteristics between objects or actions **EARLIER**
- M** Provides representations (e.g., drawings, models, communications) that include general features about objects or actions in their environment **MIDDLE**
- L** Provides representations of the details of objects or actions in their environment, with some accuracy **LATER**

Integrating

- E** Communicates about information that they helped to gather (e.g., tallying, charting, simple graphing, or complex drawings) **EARLIER**
- M** Identifies patterns and draws simple conclusions based on recorded information **MIDDLE**
- L** Identifies and communicates how the evidence informs the questions or problems explored **LATER**