

# Grade 3

Adopted 2016

## Matter and Its Interactions PS1

### A. Structure and Properties of Matter PS1.A

- A. Predict and investigate that water can change from a liquid to a solid (freeze), and back again (melt), or from a liquid to a gas (evaporation), and back again (condensation) as the result of temperature changes. 3.PS1.A

### B. Types of Interactions of Matter PS1.B

- B. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot. 3.PS1.B

## Motion and Stability: Forces and Interactions PS2

### B. Types of Interaction PS2.B

- B. Plan and conduct investigations to determine the cause and effect relationship of electric or magnetic interactions between two objects not in contact with each other. 3.PS2.B

## From Molecules to Organisms: Structure and Processes LS1

### A. Structure and Function LS1.A

- A. Construct an argument with evidence that in a particular ecosystem some organisms -- based on structural adaptations or behaviors -- can survive well, some survive less well, and some cannot survive at all. 3.LS1.A

### B. Growth and Development of Organisms LS1.B

- B. Develop a model to compare and contrast observations on the life cycle of different plants and animals. 3.LS1.B

## Heredity: Inheritance and Variation of Traits LS3

### A. Inheritance of Traits LS3.A

- A. Construct scientific arguments to support claims that some characteristics of organisms are inherited from parents and some are influenced by the environment. 3.LS3.A

### B. Natural Selection LS3.B

- B. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving and finding mates. 3.LS3.B

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**C. Adaptation** LS3.C

- C. Construct an argument with evidence that in a particular ecosystem some organisms -- based on structural adaptations or behaviors -- can survive well, some survive less well, and some cannot. 3.LS3.C
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**D. Biodiversity and Humans** LS3.D

- D. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. 3.LS3.D
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**Earth's Systems** ESS2**D. Weather and Climate** ESS2.D

- a. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. 3.ESS2.D.A
- b. Obtain and combine information to describe climates in different regions of the world. 3.ESS2.D.B
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**Earth and Human Activity** ESS3**B. Natural Hazards** ESS3.B

- B. Make a claim about the merit of an existing design solution (e.g. levies, tornado shelters, sea walls, etc.) that reduces the impacts of a weather-related hazard. 3.ESS3.B
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**Engineering Design** ETS1**A. Defining and Delimiting Engineering Problems** ETS1.A

- A. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. 3.ETS1.A
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**B. Developing Possible Solutions** ETS1.B

- B. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. 3.ETS1.B
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**C. Optimizing the Solution Process** ETS1.C

- C. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved. 3.ETS1.C