

3rd Grade Science

Physical Science PS

2 Motion and Stability: Forces and Interactions PS2

- 1 Plan and carry out an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. (SEP: 3; DCI: PS2.A, PS2.B; CCC: Cause/Effect) 3-PS2-1
- 2 Make observations and/or measurements of an object's motion to provide evidence for how a pattern can be used to predict future motion. (SEP: 3; DCI: PS2.A; CCC: Patterns) 3-PS2-2
- 3 Ask questions about cause-and-effect relationships of electric or magnetic interactions between two objects not in contact with each other. (SEP: 1; DCI: PS2.B; CCC: Cause/Effect) 3-PS2-3
- 4 Define a simple design problem that can be solved by applying scientific ideas about magnets. (SEP: 1; DCI: PS2.B, ETS1.A; CCC: Cause/Effect) Alignment may include 3-5-ETS1-1 3-PS2-4

Life Science LS

1 From Molecules to Organisms: Structures and Processes LS1

- 1 Develop models to describe that organisms have unique and diverse life cycles, but all have in common birth, growth, reproduction, and death. (SEP: 1; DCI: LS1.B; CCC: Patterns) 3-LS1-1

2 Ecosystems: Interactions, Energy, and Dynamics LS2

- 1 Construct an argument that some animals form groups that help members survive. (SEP: 7; DCI: LS2.D; CCC: Cause/Effect) 3-LS2-1

3 Heredity: Inheritance and Variation of Traits LS3

- 1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variations of these traits exist in a group of similar organisms. (SEP: 4; DCI: LS3.A, LS3.B; CCC: Patterns) 3-LS3-1
- 2 Use evidence and reasoning to support the explanation that traits can be influenced by the environment. (SEP: 6; DCI: LS3.A, LS3.B; CCC: Cause/Effect) 3-LS3-2

4 Biological Unity and Diversity LS4

- 1 Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. (SEP: 4; DCI: LS4.A; CCC: Scale/Prop.) 3-LS4-1

- 2 Use evidence and reasoning to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. (SEP: 6; DCI: LS4.B; CCC: Cause/Effect) **3-LS4-2**
- 3 Construct an argument with evidence how some organisms thrive, some struggle to survive, and some cannot survive in a particular habitat. (SEP: 7; DCI: LS4.C; CCC: Cause/Effect) **3-LS4-3**
- 4 Make an evidence-based claim about the validity of a solution to a change in the environment that affects the types of plants and animals that live there. (SEP: 7; DCI: LS2.C, LS4.D, ETS1.A; CCC: Systems) Alignment may include 3-5-ETS1-1 **3-LS4-4**

Earth and Space Science **ESS**

2 Earth's Systems **ESS2**

- 1 Represent data in tables and graphical displays to describe weather conditions during a particular season. (SEP: 4; DCI: ESS2.D; CCC: Patterns) **3-ESS2-1**
- 2 Obtain and combine information to describe climates in different regions of the world. (SEP: 8; DCI: ESS2.D; CCC: Patterns) **3-ESS2-2**

3 Earth and Human Activity **ESS3**

- 1 Make an evidence-based claim about the validity of a design solution that reduces the impacts of a weather-related hazard. (SEP: 7; DCI: ESS3.B, ETS1.A; CCC: Cause/Effect) Alignment may include 3-5-ETS1-1 **3-ESS3-1**

Engineering, Technology, and Applications of Science **ETS**

1 Engineering Design **ETS1**

- 1 Define a simple design problem reflecting a need or want that includes specified criteria for success and constraints on materials, time, or cost. Alignment may include 3-PS2-4; 3-LS4-4; 3-ESS3-1; 4-PS3-4 **3-5-ETS1-1**
- 2 Generate and compare multiple solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem. Alignment may include 4-ESS3-2 **3-5-ETS1-2**
- 3 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. Alignment may include 4-PS4-3 **3-5-ETS1-3**