Iowa Science

Third Grade

Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. 3-PS2-1	**1** **Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.** 3-PS2-1
Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. 3-PS2-2	**2** **Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.** 3-PS2-2
Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. 3-PS2-3	**3** **Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.** 3-PS2-3
Define a simple design problem that can be solved by applying scientific ideas about magnets. 3-PS2-4	**4** **Define a simple design problem that can be solved by applying scientific ideas about magnets.** 3-PS2-4
Develop models to describe that organisms have unique and diverse life cycles but all have in common: birth, growth, reproduction, and death. 3-LS1-1	**5** **Develop models to describe that organisms have unique and diverse life cycles but all have in common: birth, growth, reproduction, and death.** 3-LS1-1

Construct an argument that some animals form groups that help members survive. 3-LS2-1	**6** **Construct an argument that some animals form groups that help members survive.** 3-LS2-1
Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms. 3-LS3-1	**7** **Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.** 3-LS3-1
Use evidence to support the explanation that traits can be influenced by the environment. 3-LS3-2	**8** **Use evidence to support the explanation that traits can be influenced by the environment.** 3-LS3-2
Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. 3-LS4-1	**9** **Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.** 3-LS4-1
Use evidence 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. 3-LS4-2	**10** **Use evidence 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.** 3-LS4-2
Construct an argument with evidence that in a particular habitat, some organisms can survive well, some survive less well, and some cannot survive at all. 3-LS4-3	**11** **Construct an argument with evidence that in a particular habitat, some organisms can survive well, some survive less well, and some cannot survive at all.** 3-LS4-3

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-LS4-4	12 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-LS4-4
Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. 3-ESS2-1	13 Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. 3-ESS2-1
Obtain and combine information to describe climates in different regions of the world. 3-ESS2-2	14 Obtain and combine information to describe climates in different regions of the world. 3-ESS2-2
Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. 3-ESS3-1	15 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. 3-ESS3-1
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-ETS1-1	16 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-ETS1-1
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-ETS1-2	17 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-ETS1-2

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-ETS1-3

18 **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-ETS1-3