West Virginia Science

Grade 3

Adopted 2022

Physical Science DOMAIN

Forces and Interactions

1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. S.3.1
2. Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. S.3.2
3. Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. S.3.3
4. Define a simple design problem that can be solved by applying scientific ideas about magnets. S.3.4
5. Support an argument that the gravitational force exerted by Earth on objects is directed toward the center of the Earth. S.3.5

Life Science DOMAIN

Interdependent Relationships in Ecosystems

6. Construct an argument that some animals form groups that help members survive. S.3.6
7. 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. S.3.7
8. 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. S.3.8

Inheritance and Variation of Traits: Life Cycles and Traits

9. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. S.3.9
10. 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. S.3.10
11. Use evidence to support the explanation that traits can be influenced by the environment. S.3.11
12. 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. S.3.12

Earth and Space Science DOMAIN

Weather and Climate

13. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. S.3.13
14. Obtain and combine information to describe climates in different regions of the world. S.3.14
15. Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. S.3.15

Engineering, Technology, and Applications of Science DOMAIN

Engineering Design

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. EDS.3.16
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. EDS.3.17
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. EDS.3.18