West Virginia Alternate Academic Achievement Standards

Science: Biology

Life Science

Structure and Function

1 Explain how different organs of the body carry out essential functions of life. A.S.10.1

2 Use a model to illustrate the organization and interaction of major organs into systems (e.g., circulatory, respiratory, digestive, sensory) in the body to provide specific functions. A.S.10.2

3 Collect data from an investigation to show how different organisms react to change (e.g., heart rate increases with exercise, pupils react to light). A.S.10.3

Matter and Energy in Organisms and Ecosystems

4 Use models to describe the energy transfer from the sun to producers to consumers. A.S.10.4

Interdependent Relationships in Ecosystems

5 Use graphical representations to explain changes over time in the population size of an animal species including those on the endangered list. A.S.10.5

6 Use graphical representations to explain an animal's dependence on its ecosystem (e.g., competition with other organisms, challenges due to climate, availability of land, food, water, shelter). A.S.10.6

7 Evaluate a strategy to protect a species. A.S.10.7

Inheritance and Variation of Traits

8 Use a model to illustrate how growth occurs when cells multiply. A.S.10.8

9 Explain why reproduction may or may not result in offspring with different traits. A.S.10.9

Natural Selection and Evolution

10 Explain how the traits of particular species allow them to survive in their specific environments. A.S.10.10

11 Interpret data sets to identify an advantageous heritable trait. A.S.10.11

Engineering, Technology and Applications of Science

Engineering Design

12 Generate and compare multiple possible solutions to a real-world problem based on how well each is likely to meet the criteria and constraints of the problem. A.S.10.12

Science Literacy

Reading: Key Ideas and Details

13 Follow procedures when taking measurements or carrying out experiments. A.S.10.13

Reading: Craft and Structure

14 Identify the meaning of symbols, key terms, and other domain-specific words. A.S.10.14

Reading: Integration of Knowledge and Ideas

15 Express information visually (e.g., in a flowchart, diagram, model). A.S.10.15

Writing: Text Types and Purposes

16 Compare and contrast discipline-specific content using domain-specific vocabulary to explain the topic. A.S.10.16

17 Provide an explanation of discipline-specific content using domain-specific vocabulary to explain the topic. A.S.10.17