

Science

Fourth Grade

Life Science Practices and Concepts

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| 4.LS1-1 | Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. |
| 4.LS1-2 | Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways. |

Earth and Space Science Practices and Concepts

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| 4.ESS1-1 | Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time. |
| 4.ESS2-1 | Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation. |

Physical Science Practices and Concepts

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| 4.PS3-1 | Use evidence to construct an explanation relating the speed of an object to the energy of that object. |
| 4.PS3-3 | Ask questions and predict outcomes about the changes in energy that occur when objects collide. |
| 4.PS3-4 | Apply scientific ideas to design, test, and refine a device that converts energy from one form to another. |
| 4.PS4-1 | Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move. |

Engineering and Application

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| 3-5.ETS1-1 | Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost. |
| 3-5.ETS1-2 | 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. |
| 3-5.ETS1-3 | 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. |