Missouri Science

Grade K

Adopted 2016

Matter and Its Interactions PS1

A. Structure and Properties of Matter PS1.A

A. Make qualitative observations of the physical properties of objects (i.e., size, shape, color, mass). K.PS1.A

Motion and Stability: Forces and Interactions PS2

A. Forces and Motion PS2.A

a. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. K.PS2.A.A

b. Describe ways to change the motion of an object (i.e., how to cause an object to go slower, go faster, go farther, change direction, stop). K.PS2.A.B

Energy PS3

A. Definitions of Energy PS3.A

A. Make observations to determine the effect of sunlight on Earth's surface. K.PS3.A

B. Conservation of Energy and Energy Transfer PS3.B

B. With prompting and support, use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area K.PS3.B

From Molecules to Organisms: Structure and Processes LS1

C. Organization for Matter and Energy Flow in Organisms LS1.C

C. Use observations to describe patterns of what plants and animals (including humans) need to survive. K.LS1.C

Earth's Place in the Universe ESS1

B. Earth and the Solar System ESS1.B

B. Make observations during different seasons to relate the amount of daylight to the time of year. K.ESS1.B

Earth's Systems ESS2

D. Weather and Climate ESS2.D

D. Use and share observations of local weather conditions to describe patterns over time. K.ESS2.D

E. Biogeology ESS2.E

E. With prompting and support, construct an argument using evidence for how plants and animals (including but not limited to humans) can change the environment to meet their needs. K.ESS2.E

Earth and Human Activity ESS3

A. Natural Resources ESS3.A

A. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live. K.ESS3.A

B. Natural Hazards ESS3.B

B. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment. K.ESS3.B

Engineering Design ETS1

A. Defining and Delimiting Engineering Problems ETS1.A

A. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool. K.ETS1.A

B. Developing Possible Solutions ETS1.B

B. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem. K.ETS1.B

C. Optimizing the Solution Process ETS1.C

C. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. K.ETS1.C