Washington Science

Kindergarten

Physical Science

What happens if you push or pull an object in different ways?

2 Use evidence, data, and investigation to show and compare how pushes and pulls affect the motion of objects; apply learned understandings to design and test ways to intentionally control the motion of objects. WA.K.PS2

- 1 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-PS2-1
- 2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull. [Engineering] K-PS2-2

How does sunlight affect the temperature of things on the Earth? How can we change that?

3 Use evidence and investigation to show how sunlight affects temperature of surfaces; use learned understandings to design and build a structure that can decrease the temperature of a surface heated by the sun. WA.K.PS3

- 1 Make observations to determine the effect of sunlight on Earth's surface. K-PS3-1
- 2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area. [Climate] [Engineering] [ESE] K-PS3-2

Life Science

What do plants and animals need to survive and how do they get it?

1 Use evidence and modeling to show and explain what living things need to survive and how they get it from the places they live. WA K.LS1

- 1 Use observations to describe patterns of what plants and animals (including humans) need to survive. [ESE] K-LS1-1
- 2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. [ESE] K-LS1-2
- 3 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live. [Climate] [ESE] K-ESS3-1

Earth and Space Sciences	**What patterns can we see in our weather and how can we use those patterns to be safe?** 2 Use evidence and data to show and explain patterns in local weather and how humans use those patterns to plan ahead and design for safety. WA K.ESS2 1 Use and share observations of local weather conditions to describe patterns over time. [Climate] K-ESS2-1 2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather. [Climate] [Engineering] K-ESS3-2 **How can humans help the Earth?**
Develop and share ideas about how humans can help and protect the environment where they live. WA K.ESS3	**3 Develop and share ideas about how humans can help and protect the environment where they live.** WA K.ESS3
Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment. [Climate] [Engineering] [ESE] K-ESS3-3	**1 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment. [Climate] [Engineering] [ESE]** K-ESS3-3
K–2 Engineering, Technology, and Applications of Science	**How do we engineer solutions to a problem?** 1 Use modeling, investigation, and data to design, test, and improve solutions to simple problems that can be solved through engineering. WA K.ETS1 1 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-2-ETS1-1 2 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-2-ETS1-2 3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs. K-2-ETS1-3
Environmental and Sustainability Education	**Environmental and Sustainability Education**
Through project-based learning, develop an investigation related to the interconnected spheres of nature,	**1 Design an investigation to explore phenomena related to the roles of money, society, environmental problems, and sustainability solutions in local and tribal communities.** K.ESE.1-1

society, and the economy in partnership with local communities, including tribes, then communicate about and act upon solutions for local environmental problems. WA.K.ESE.1

2 **Analyze and evaluate data gathered on school grounds to explain local scientific phenomena resulting from the influence that natural settings and human-built structures have on each other.** K.ESE.1-2

3 **Engage in place-based learning to communicate about and act on personal and collective solutions for sustainable communities, with a focus on tribal sovereignty.** K.ESE.1-3