



Sun and Shade in the Schoolyard Kindergarten

Overview

Students will learn that the sun warms the Earth’s surface by conducting a scientific investigation and designing a model to find the ideal place for a lizard to warm up or cool down in their schoolyard. Using their sense of touch, students will investigate different surfaces of the Earth in the sun and shade to determine which are warm or cool. Students will then design a model home for a lizard.

Phenomenon

Where can a lizard get warm or cool in our schoolyard?

Next Generation Science Standards Addressed

K-PS3-1 Make observations to determine the effect of sunlight on Earth’s surface.

K-PS3-2 Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on Earth’s surface.

Science & Engineering Practices	Disciplinary Core Ideas	Cross Cutting Concepts
Planning and carrying out investigations Constructing explanations and designing solutions Analyzing and interpreting data	PS3.B Conservation of energy and energy transfer	Cause and effect

Common Core State Standards Addressed

ELA-Literacy

SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.

W.K.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Mathematics

K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.

K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.