

Summer 2020 Lesson

Class: Science

Grade Band: 2-5

Teacher: Mrs. Bickel

Lesson: Science Friction

Objective: We will learn how friction affect the movement of objects and how we can use friction in everyday life

Materials: your two hands, 2 markers or pencils from your supply kit, your shoe (and perhaps someone else's shoe)

We know that an object in motion stay in motion unless another force acts on it. You can see friction at work when a pin wheel stops spinning or a bouncy ball stops bouncing. Let's do activities involving friction

Friction basics

Friction describes what happen when two objects rub together. Try rubbing your hands quickly together for at least 30 seconds. When time is up, put your hands on your cheeks and feel the warmth. Friction causes heat.

How friction affects movement

Let's discover what kind of surface removes friction and allows for more movement. Get two of same thing from your supply bag. They can be two pencils or two markers. You could also use two balls or two cars if you have them at home. First roll both of you objects on the same kind of floor (carpet, tile, cement). See how each surface affects how far and fast the object moves. Objects move farther and faster over surfaces that cause less friction. What conclusions can you draw about the surfaces your tried. Think of other ways you can test how friction affects movement.

How people use friction to help solve problems

We use friction to help keep us safe. Look at the bottom of your shoe the bumps on the bottom of your shoe (also called the sole of your shoe) help to slow down are motion. If possible, compare the soles of two different shoes and decide which sole will slow down motion the best. Try out your idea (also known as a hypothesis) and see if your hypothesis was correct.

Vocabulary: friction, surface, hypothesis, movement