WHAT DO YOUR TRACKS TELL?

See what you can learn look from your own tracks

Arizona Science Standards

SC02-S1C1-01
SC04-S1C1-01, 02, 03
SC01-S1C2-03, 04
SC01-S1C3-01, 02
SC02-S1C3-02
SC04-S1C3-01

OBJECTIVES

Students will:

* Make and observe their tracks and draw conclusions.
* Compare and contrast each others tracks.
* Compare their tracks to animal tracks and draw conclusions.

Supplies needed:

* Several containers for dipping feet into water
* Sidewalk chalk
* Towels for drying feet
* Craft paper
* Rulers

BACKGROUND

It is often very difficult to observe desert animals directly or to follow them as they move from place to place because many are active at night, very secretive, or move over vast areas. One thing we do know is that most animals that move on the ground have the potential to leave tracks. One way to learn about desert animals is to find and analyze their tracks, because different species generally have distinctive footprints. Tracks can sometimes be seen long after an animal has left the area.

A series of tracks may reveal whether an animal was running or walking, if it was traveling alone or in a large group, and in what direction it was going. Animal tracks can be used to create lists of species that live in a certain area, as well as to determine what specific areas they use most.

WHAT DO YOUR TRACKS TELL?

To begin learning about animal tracks, make your own tracks and analyze them with your class. All you need is a bit of pavement, a pan of water, chalk to outline your footprints, and a towel for drying your feet. You can do this activity with your shoes on or off.

* Carefully dip each foot in the pan of water. As you step out of the water, you will leave wet footprints on the ground.
* Make different kinds of footprints. Stand still. Walk, run, skip, or jump forward or backward.
* Wet your feet again if you need to, and have another student outline your tracks with chalk in case they dry too quickly.
* When you are done, look at your footprints, and answer the following questions.

1.Which parts of your feet touch the ground when you are standing?

2.When you walk, run, skip, or jump, which parts of your feet touch first? Which touch last?

Now compare your footprints to those of your classmates and answer the following questions.

1.What are the similarities and differences among different footprints?

2.What clues do you see in different footprints that tell you whether the person who made them was standing, walking, running, or doing something else?

Birds and other animals also leave tracks. What similarities and differences do you think you would find between two-legged and four-legged animals? Large animals and small animals? What differences will you find between birds, mammals, reptiles, and other types of animals?

ALTERNATE ACTIVITY

On a large sheet of craft paper, trace each others' feet. Cut the shapes out and label with the foot's owner.

Use these shapes to do measuring activities. Measure each individual foot and graph. Arrange by size, smallest to longest and then reverse. Line them up and measure how long of a line they form.

Use rubber animal track stamps to make impressions of different animal footprints. Using a ruler, measure the size of the animal's footprint and compare to their own cutouts. How many coyote footprints does it take to make their footprint? How many bear feet? Packrat feet?