


Trace Fossils


6th - 8th
Grade

Materials

 Ruler,
yardstick/
meter stick, or
measuring
tape

 Paper

 Pencil

 Calculator
(optional)



Students will learn how paleontologists can estimate the height of a dinosaur by studying its footprint.

Paleontologists learn about prehistoric animals by studying fossils. Sometimes they only find things like footprints. Even those can give us some really good clues.

Directions

- Measure the length of one of your feet. Your foot length is the distance from the back of your heel to the tip of your big toe. Write down your foot length.

Measure how long your leg is. Your leg length is the distance from the floor to your hip bone when you're standing up straight. Record your leg length.

- The last measurement to take is your height. Measure the distance from the floor to the top of your head. Record your height.
- Divide your leg length by your foot length.
- Now divide your height by your leg length.

What do these numbers tell you?

When we compare two measurements like foot length-to-height we get something called a ratio. The ratio of foot length to leg length is about 4:1. That means that your leg is about 4 times longer than your foot. Was your answer close to this? What is the ratio of your height to foot length? What about height to leg length?

Paleontologists have discovered that dinosaurs have certain ratios, too. They have found that for most bipedal (two-legged) dinosaurs, the ratio of body length to foot length is about 10:1. That means that a dinosaur with a 2ft long footprint would be about 20 ft long!

**Click the bone to become a
Super Fossil Finder!**

