

## Making Imprint Fossils

Scientists learn about the size, weight and shape of a dinosaur by examining the casts they make from dinosaur prints. Scientists make molds of the imprints left in mud or dirt, and then they fill the molds with plaster so they can make a cast. The shape of the cast can be used to figure out the size of a dinosaur and the way it moved.

### Objective

Create imprint fossils to model dinosaur tracks.

### Materials

- a packet of liquid latex
- a measuring cup
- water
- a fork
- a large, plastic container just bigger than your foot
- some clay
- a bowl
- a small letter scale

**Safety Notice:** All applicable laboratory safety rules must be followed. Students should not perform any experimental activity without the teacher's supervision and express permission. Students must follow safety guidelines and wear appropriate protective gear.

### Procedure

1. First, press the clay evenly into the bottom of the plastic container. Make sure the clay is at least four centimeters deep. Now, find something or someone to balance yourself against, and press your foot firmly into the clay. After you remove your foot, you should see the print in the clay. This will be your mold.
2. Now you will make the cast. The cast you will make represents the hardened minerals that would fill an impression or hole made by an animal. A cast is what you often see in a museum — not an actual bone. Empty a packet of liquid latex into a bowl, add a cup of water and stir the mixture thoroughly until all the powder is mixed in with the water. The latex should be smooth and free of any bubbles. When the mixture is ready, pour it into the mold. Let this sit for 30 minutes.
3. Once your cast has dried, you can remove it from the clay mold. What does it look like? Describe its shape and size. Use the small letter scale to weigh the cast. List your observations below.

---

---

---

---

### Conclusions

- Compare your cast to a friend's cast. How are they similar? How are they different?

---

---

---

---

- How can the weight of a dinosaur's cast give scientists an idea of the weight of the dinosaur?

---

---

---

---