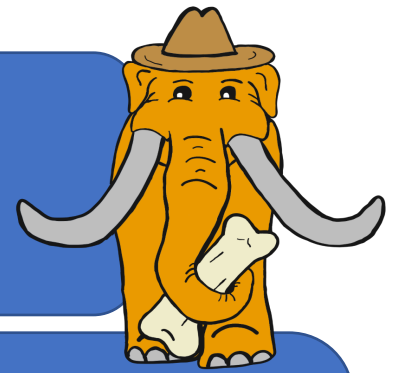


# Science Saturday @ HOME

## Footprints Tell A Story



**Gathering Supplies:**  
Soft Clay or Wet Dirt (if outside)  
Toys With Feet

## Footprints Tell A Story!

Ichnofossils are a name paleontologists have given to fossils, also called trace fossils, that show activity of a plant or animal but does not contain the actually preserved remains of the plant or animal. A well known example of an ichnofossil would be the footprints of an 3.6 million year old early human, *Australopithecus afarensis*, found in Tanzania or the trackways of over 5,000 footprints from 15 different species of dinosaurs in Cal Orcko, Bolivia.



These footprints can tell a story of an event or a moment in time that paleontologists work to read. A new discovery in White Sands, New Mexico gives us a look at a day during the Ice Ages. This 1.5 kilometer long track has the footprints of a young girl, caring an infant, as she walks quickly through the wet sand along an ancient lake. At one point she sets the infant down and then picks them up again. After a short time a couple of Columbian Mammoths cross their path, stepping on top of the girl's footprints. In another section of her tracks, a giant sloth comes across her trail. The sloth stops and raises up on its back legs, possibly to sniff the air for predators, then changes direction and moves away from the human trail. Later the same girl walks back in the opposite direction, not caring the infant. These prints made in the white sand disappear quickly as the wind blows the dunes around, so paleontologists have to quickly study the tracks using different methods to record and measure the prints.



Top photo of Cal Orcko, Bolivia by Pete Oxford/Miner Pictures/Corbis  
Bottom from White Sands National Park source: nsp.org.

## Try This! Tell Your Own Story in Footprints.

1. Roll out a smooth piece of clay or head outside and make a smooth section of mud.
2. Pick a toy with feet and have them walk across your soft surface pressing down enough to make footprints. This is the first part of your story.
3. Pick another toy, such as an animal. Decide if this animal is walking along with the first? Are they walking together or just heading to the same destination?
4. Now pick another toy. Maybe this one crosses the first one's path.
4. Once you are done making your footprints. See what parts of your story you can tell from just the footprints.
5. Now try your hand at telling the story about the Ice Age animal tracks below. Remember the footprints that happen first will have later prints cross on top of them.

The prints in red belong to a mastodon.

The prints in green are from a camel.

The prints in yellow are from a giant sloth.

Which animal walked along the path first?

Were all the animals heading in the same direction?

