## **FOSSIL IMPRESSIONS**

Trace fossils are remnants of the past paleontologists use to decode prehistoric mysteries. In this activity you will be recreating fossilization of trace fossils.

### **MATERIALS**

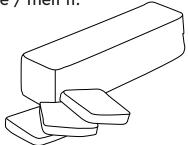
1 cup unsalted butter
1/3 cup white sugar
1/3 cup brown sugar
1 tsp vanilla extract
1 tbsp ground coffee (optional)
2 cups flour
Melthing chocolate
Toy dinosaur(s)

#### **INSTRUCTIONS**

1) Sanitize your dinosaurs. (We used hot water and dish soap. Don't forget to rinse thoroughly!)



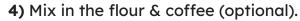
2) Set your butter out for a bit so it has time to warm up to room temperature. Don't microwave / melt it.



**3)** Blend together the butter, sugars, & vanilla.

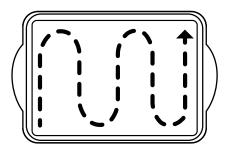
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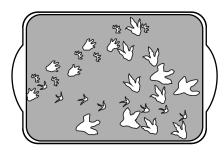




**5)** Spread in a pan.



6) Make your footprints! Dust your dino feet with flour to keep them from sticking. Press the dinosaurs into the surface and lift.

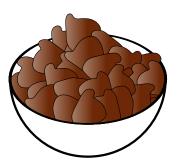


- 7) Bake at 163°C / 325°F for 35-40 minutes.
- 8) Enjoy! (after they've cooled down). The footprints may have distorted a bit after baking but they also deform after being in the ground for millions of years! It takes an experienced eye to spot dinosaur trackways...



### **ADVANCED INSTRUCTIONS**

9) With the help of a grown-up, melt 1 cup of chocolate in a microwave-safe bowl.



**10)** Dust the footprints with a lot of cocoa powder, then carefully pour over the melted chocolate and let cool.



**11)** Try to lift the chocolate away from the surface. What does it look like?

## **Questions**

If you've completed the advanced and basic steps, you've simulated two ways that fossils are made. What are these two types of fossils called, and how do you think they're naturally formed?	
If you had more than one type of dinosaur, how do you think these species would have interacted to form your fossil footprints? Are they likely to have formed at the same time? Why or why not?	





# **POTATO FEET**

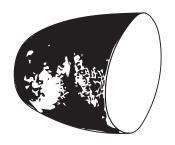
Make a potato stamp in the shape of a dinosaur footprint.

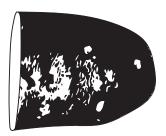
### **MATERIALS**

Potato Skewer (or other pointy object) Knife (be careful!)

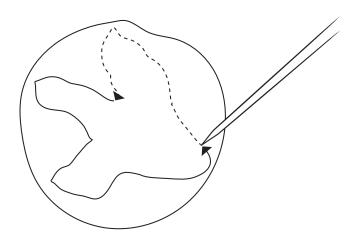
### **INSTRUCTIONS**

1) Cut the potato in half.

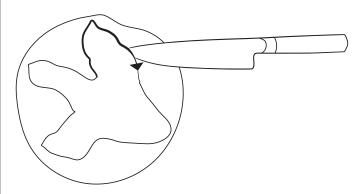




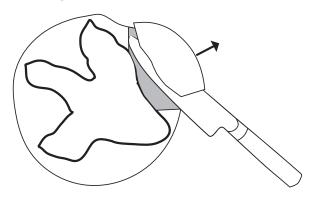
2) Use the skewer to carve an outline of a footprint into the potato.



**3)** Cut around the footprint outline with the point of the knife.



**4)** Cut away the potato on the outside leaving the the footprint outline.



5) Make footprints!



Here are some footprints you could try and make.

