

Day 1 Fossil Dig Instructions for the Teacher

On Day 1 of the unit, teams of learners will work together on a “fossil dig” to uncover a plant fossil. The fossil digs **will have to be prepared several days ahead of time** to allow time for making the fossils and preparing the “digs.” The teacher will **prepare 1 fossil dig per team.**

Materials:

- 8” paper or Styrofoam plates
- plaster (Perfect Cast or similar product)
- measuring cup
- water
- paper cup
- spoon
- jar of Vaseline
- real leaves (teacher choice)
- large paperclips
- hammer
- goggles
- newspaper or cardboard
- aluminum lasagna pans, plastic tubs, or cardboard boxes, approximately 14” x 10” x 3” (deep enough to bury fossil)
- soil (enough to cover fossils in each pan; it is recommended that you use bagged soil instead of soil from the yard to avoid safety hazards)

Directions:

(This will make 1 fossil (each team will need 1 fossil))

- You will use 1 cup of plaster with $\frac{1}{2}$ cup of water.
- Pour water into paper cup and **gradually** add the plaster, stirring with spoon to a creamy consistency (about 2 minutes).
- Pour onto one plate. Smooth with the back of the spoon or tilt the plate carefully to spread the plaster out evenly over the plate.
- Choose either one large leaf or 2 different leaves that will fit on the plate. Coat the underside of the leaves with a thin, smooth amount of Vaseline (to facilitate removing them from the plaster).

- Press leaf or leaves gently onto the plaster. Allow 30 minutes for the plaster to semi-dry and remove the leaves. Use an opened paperclip to gently release any parts of the leaf or leaves that stick.
- Remove the fossil from the plate and allow to air dry about 24 hours.

To make the “dig”:

- After drying the fossils for 24 hours or more, place each fossil, one at a time, on a piece of cardboard or newspaper.
- Put on goggles! Use the hammer to strike the fossil right in the middle to break it into pieces. One good strike should do it!
- Place enough soil in the aluminum pan to randomly bury the fossil pieces.
- Team members will take turns digging out a piece at a time, then reassemble.
- See Day 1 lesson for further instructions.