**Fossil Activity (2 days)**

**Day 1: Prepare Fossils**

* Materials:
  + Modeling Clay
  + Plaster A-pair-us
  + Water
  + Hard Object (toy dinosaur, sea shell, etc.)
  + Paper Plate
* Directions:
  + Provide each student or group with modeling clay. Allow student(s) to form clay into an about ¾ inch thick circle and place it on the paper plate.
  + Take the hard object and make an “impression” of it into the center of the clay. Be sure to remove the object.
  + Mix plaster a-pair-us with water and stir until it is a semi-liquid mixture.
  + Pour the plaster-a-pair-us over the modeling clay to allow for about 2cm of mixture above the hard object impression.
  + Let the plaster-a-pair-us dry overnight.
  + The following day, CAREFULLY remove the modeling clay from the hardened plaster a-pair-us to retrieve the fossil.

**Day 2: Archaeological Engineering**

* Materials:
  + Serving trays (1 per group)
  + Dirt or sand
  + Prepared fossils
  + Popsicle sticks
  + Straws
  + Tape
  + Index cards
  + Tooth brush
  + Paint brush
  + Paper clip
* Directions:
  + PREPARE BEFORE STUDENTS START SCIENCE:
    - Set up enough serving trays for each group that you will have.
    - Place 1 or 2 fossils at the bottom of the serving tray. (Avoid placing it directly in the middle.
    - Place dirt or sand on top of the fossil and fill the serving tray to “bury” the fossil.
    - Create “materials bags” for each group using the materials above (or choose your own materials).
  + Activity with students:
    - Explain to the students that they are going to be “Archaeological Engineers” for the day. They have discovered a spot in the ground where they believe there may be a fossil. They need to choose or alter a given material that will best remove the fossil from the “tray” without using their own hands. (The materials are the only things that can touch the fossil or sand/dirt).
    - Give the students 12 minutes to retrieve and clean off their fossil.
    - Discuss each groups strategy together as a class.

**Power-point Slides**







