Title of Lesson: What are Fossils?
Theme: Earth/Space Science
Unit Number: 3  Unit Title: Rocks, Minerals, Soil and Fossils
Performance Standard(s) Covered (enter codes):
   - S3E2: Students will investigate fossils as evidence of organisms that lived long ago
     a. Investigate fossils by observing authentic fossils or models of fossils or view information resources about fossils as evidence of organisms that lived long ago.
     b. Describe how a fossil is formed.

Enduring Standards (objectives of activity):
   Habits of Mind
   - Asks questions
   - Uses numbers to quantify
   - Works in a group
   - Uses tools to measure and view
   - Looks at how parts of things are needed
   - Describes and compares using physical attributes
   - Observes using senses
   - Draws and describes observations

Content (key terms and topics covered):
Fossils
Trace Fossils
Mold Fossils
Cast Fossils
Paleontologists

Learning Activity (Description in Steps)
Abstract (limit 100 characters): This lesson included 4 parts to help students understand what fossils are.
Details: In the beginning of the lesson we followed the outline of the book. We went over the vocabulary in the section. After the class grasped the understand of what a fossil is, we talked about the different types of fossils (trace, mold, and cast), how they are alike and how they are different. We transitioned into the idea that fossils give us insight into what life was like before we were here and the types of animals that were around. We looked at a slide show of different dinosaur tracks left in the mud and tried to imagine what the dino looked like. We also talked about how other remian, such as teeth and bones, may be left behind and they also give us insight on about the animal. For example, if we found teeth from a dinosaur and they were sharp, we concluded they might have eaten meat, but if they were smooth, they might have eaten plants.
We also discused the formation of fossils. We started first by discussing it as a class. After the class had some understanding of the order a fossil forms, I printed out descriptions and pictures that correlated with the fossil making process. A handful of students came to the board and had to put
them in order without talking. At the end, we went over the order and corrected which ones were wrong as a class.

I read a quick poem to wrap up the bulk of the fossil section, "Fossils" by Eileen R. Meyers. The last part was the most fun for students. I talked to them about what paleontologists do for a living and how they are related to fossils. The culminating activity involved them being paleontologists. I passed out napkins, cookies, and toothpicks. The cookie was the dirt and the chocolate chips where the fossils. They had to use the toothpicks to dig the fossils out of the cookie. At the end we counted them to see who had the most.

Materials Needed (Type and Quantity):
Chocolate Chip Cookies (Enough for each student)
Toothpicks
Napkins
Handouts

Notes and Tips (suggested changes, alternative methods, cautions):
If you really want to get fancy when they become paleontologists, consider getting paint brushes. They can brush away the crumbs of the cookie, similar to the way paleontologists brush away dirt as they excavate fossils

Sources/References:
1) Internet
2) Textbook
3)