



## Dr. Dinosaur!

### Learning Extensions

Age: 3 through Pre-K

#### **Domain: SCIENTIFIC DEVELOPMENT**

Content Standards: SD1, SD2, SD4

The children will:

- use processes of science to actively explore and increase understanding of the environment (SD1)
- acquire scientific knowledge related to life science (SD2)
- acquire scientific knowledge related to earth science (SD4)

#### **Activity: Make a Fossil, Find a Fossil**

The children will create a fossil of their own by using leaves, sticks, shells or even washed chicken bones in a 'rock dough' material that resembles rough limestone. To make the dough, mix: 2 cups flour, 1 cup salt, 1 tbs. vegetable oil, 1 tsp. alum and ½-1 cup water. This recipe is enough for 25-30 children. Have the children knead the dough until it is smooth. Give each child enough dough to make a ball about one inch in diameter. Children roll into a ball, and flatten with the palm of their hand. Find interesting materials that can make an impression from outside, in the science or brought from home. Demonstrate how to gently push the object into the dough and lift out to make an impression. After each child is done, carefully pick up and put on a tray to dry and label the bottom with their initials. Dry overnight. The next day, the fossils will be ready to explore. See if the children can find their own fossil among the others. Double the recipe and have the children make two, one to take home, and one to bury in dirt at the sensory table. Put small shovels, paintbrushes and magnifying glasses out for digging, cleaning and investigating their finds. Also leave out a tray of the materials used to make impressions and they can match the fossil found to the object that was used.

#### **Domain: SOCIAL STUDIES DEVELOPMENT**

Content Standards: SS1, SS3

The children will:

- develop an appreciation of his/her role as a member of the family, the classroom and the community (SS1)
- express beginning geographic thinking (SS3)

**Activity: When I Grow Up, I want to Be a.....Paleontologist!!**

Preschoolers have already learned a lot about themselves and their families. They know that they are unique, and now are beginning to realize that they can grow up to have any job they want, if they have the knowledge and right tools. Kids love dinosaurs, but can they really become one of the few that study fossils and extinct animals? Where would you find fossils to study, and what kinds of tools do you need for this job? Rocky areas and underwater are great places to find fossils because of the way the water and rock forms layers around plants and bones. You can discuss these places, but they are too dangerous of preschoolers to explore. The best place to see real fossils is a museum, where they have been chosen, preserved and studied so that you can learn more about them. You can also show the children pictures of fossils from books or internet sites, but it's best if they can actually hold and touch them. Show them sedimentary rocks, like sandstone, limestone or shale so that they can actually see the layers that have been formed. Between these layers is where fossils are found.

Now, what kinds of tools should be used in collecting and studying fossils? Put together a collection of different kinds of tools that a paleontologist may use. Include a small shovel, a chisel (or representation), pick (or representation), brush (like a 2-3" paint brush), and magnifying glasses. Mix in other types of tools that other jobs require, like a briefcase, a fireman's hat, a stethoscope, an apron, etc. After talking about how fossils are found deep in the ground, and how carefully they must be handled, ask the children what kinds of tools they think they would need to be a paleontologist. Children will go one at a time and choose a tool and explain how it could be used to study fossils. If a child chooses something that you haven't chosen for the purpose of this job, let them explain why.....they may have a clever suggestion. An apron can be used to keep the dirt off of your clothes, and many times computers in briefcases are used to record findings. Even a hat can be used to keep the sun's hot rays from your head

**Domain: THE ARTS/CREATIVE DEVELOPMENT (and PERSONAL AND SOCIAL DEVELOPMENT)**

Content Standards: CD2, SE1

The children will:

- participate in music and movement activities (CD2)
- develop confidence and positive self awareness (SE1)

**Activity: I 'Dig' That Music!**

During Dr. Dinosaur, That Puppet Guy played and sang many genres of music: blues, rap, rock 'n roll and country. Children are developing their own preferences in the types of music they enjoy and should be exposed to many types of music from various cultures. Gather a few CD's of your own, ask parents, or download some songs from the internet that demonstrate these four genres. Many well known artists are making their own adaptations of children's songs now. Music should be instrumental or the lyrics appropriate for small children! Play a song that would be identified as 'blues.' Ask the children if they enjoyed the music and why, or why not. Does it make them feel like

moving, or is it slow and sleepy music? Play a song from each genre, and ask the same questions. Let them dance freely as the music plays and talk about how the different kinds of music made them feel like moving. Provide a variety of instruments if you have them and talk about why the children chose that instrument to play with that type of music. Take a class vote! Count how many children liked each type the best, and count which got the most votes. Talk about how different people enjoy different music and that's why there are so many types of music available for them to explore.