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Introduction

This Isn't Just a Birthday Book: Parties for All

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Fossils and Dinos

Most children are fascinated by dinosaurs and fossils. While it may not be possible for your party guests to visit a museum with real dino bones, here's an easy way to create your own fossil party. This party allows children to fulfill one of their greatest fantasies by becoming junior archaeologists, while learning how fossils were created.



Ages: 5 to 10

Time: 1 to 1½ hours



MATERIALS

- A about eight different pictures of dinosaurs
- A containers (such as yogurt containers or disposable plastic cups), one per child
- A sand
- A small rocks, shells, leaves, bones
- A petroleum jelly
- A paper towels or rags
- A plaster of **paris** (NOTE: Do not make ahead of time because it will harden. Do not put down the sink or toilet because it may clog the drain. Throw out in the garbage.)
- A tempera paints (or food coloring)
- A pail
- A small plastic insects or flowers
- A wax paper or aluminum foil
- A colorless or amber-colored nail polish (WARNING: Nail polish is flammable. Be sure to keep any birthday candles or other flames away from it.)
- A thick, veiny leaves or fish bones
- A homemade clay (see page 62) or modeling clay
- A glass or nonporous rolling pin
- A Popsicle^a sticks
- A string
- A spoons
- A toothbrush
- A empty plastic mustard bottle
- A cake mix or homemade cake batter
- A *optional*: "gummy"⁹¹-type dinosaur candies
- A large shells (such as scallops, clams, or oysters)
- A chocolate chips
- A *optional*: charcoal briquette powder, olive or vegetable oil, flat rocks, and leaves **and/or** twigs for paintbrushes
- A **cookie** sheet and other **cooking** utensils
- A *optional*: a real fossil specimen for goodie bags (These can be purchased in specialty toy shops, museum shops, or through catalogs. The prices range from 50 cents up.)

1. A Dino in Paris

We can't make a real fossil, because that would take millions of years and special conditions. We can make our own fake fossil casts in a lot less time. What kind of fossil cast would you like to make?

Give each child a small disposable cup with his or her name on it that is $\frac{1}{4}$ full of sand. Have each child choose an item to "fossilize" — a veiny leaf; a small, bumpy shell; or a chicken bone — and generously coat the item with petroleum jelly. Have the children place their items, bumpy side up, on the sand. Have paper towels or rags handy for messy hands or surfaces.

While the children are doing the above, prepare the plaster of paris or have a helper prepare it. (You may color the plaster of paris with food coloring or tempera paints to produce a colored cast.) When the children are ready, let each child pour or spoon some of the plaster of paris into his or her cup. Set the cups aside until the plaster has hardened (about a half hour). When hard, invert the cup over a pail to catch the sand, and remove the item from the plaster. The result: a plaster cast of the item.

What, you may ask, is the difference between a *cast* and a *mold*? A mold is made when liquid is poured into a hollow container and allowed to harden into the shape of the container's interior. A cast is made by pouring plaster around the outside of an object and letting the plaster harden.

2. An Experiment That Resinates

How many of you have ever looked closely at a fir or pine tree? [Option: If you happen to have a pine tree nearby, you may wish to gather some resin by either making a small cut in the side of the tree or scraping some of the existing resin off the tree to show the children.] Have you ever seen or felt the gooey, yellow stuff on the side of the tree? This is called "resin." What do you think would happen if an insect landed on this stuff? Many prehistoric insects and other very small creatures have been found enclosed in resin, or "amber" as it is called. After many years the resin hardens around these creatures and perfectly saves or preserves them. Some people wear



THINGS TO DO BEFORE THE PARTY

- A Two weeks before the party, send out the invitations and begin to gather the materials. If your child is a real dinosaur lover, you may wish to gather some of his or her favorite plastic dinos, books, posters, or related items to be used as props for the party. You may want to ask on the invitations that the children come dressed as archaeologists (with khaki shorts, hats, etc.). Let parents know that the kids could get messy.
- A The day before the party, read the instructions and make certain that you understand the experiments. Review the materials and make sure you have everything. Prepare the clays and containers.
- A **If you** are making the fossil cake, you might wish to do this the night before.
- A The day of the party, set out materials and supplies.

PARTY TIME

In experiments 1, 2, and 3 the children learn about the three types of fossils: fossil casts, amber, and fossil impressions. Experiments 1 and 2 require drying time, and the Chocolate Shells need time to chill in the fridge. A good way to save time is to have the kids make the Chocolate Shells while the plaster is setting (experiment 1), and roll out the clay (experiment 3) while the nail polish is drying (experiment 2). The fruits of experiments 1, 2, and 3 will then be ready at about the same time.

*How many of you like dinosaurs? Who can tell me which dinosaur this is? [Hold up a picture of a **dino**—be sure you know which one it is!] How about this one? [Try about eight different dinos.] How do we know if the **dino** was a meat eater or a plant eater? How do we know so much about dinosaurs and other creatures that lived long ago? We know about these creatures by studying fossils. We're going to be archaeologists and make our own fake fossils.*