Hands-On History Fun

Science Stuff:

Try the Scientific Method—just like the Greeks!

Aristotle, one of the most famous scientists and philosophers of all time, taught the "Scientific Method"—meaning a careful observation, experimentation, and recording of facts. We will apply the "scientific method" to dry ice experiments and see what happens!

You will need: dry ice (sold in most grocery stores); dish soap; water; honey; 35 mm empty film canister; plastic wide-mouthed bottle (you can use a glass canning jar as well); rubber glove; rubber band; 2-liter plastic bottle with the top cut off; pennies

Caution: You should not touch dry ice without gloves. It is so cold that it will burn your skin!

One person will need to write down what is done and what is the effect. Be sure to include the different observations and comments about the experiments, such as, "Wow!"

Experiment #1:

Drop a penny onto a chunk of dry ice large enough to hold the coin. What happens? Drop more pennies. What happens?

Experiment #2:

On another chunk of dry ice, dribble honey off a spoon. Wait for a few minutes. What happens? You may wish to use a table knife to lift the honey off the ice. Yum!

Experiment #3:

Fill an empty 35 mm film canister half-full with water. Drop a small chunk of dry ice into the water and put the cover on the canister. What happens?

Experiment #4:

Fill a plastic wide-mouthed jug one-quarter full of water. Drop a few chunks of dry ice into the jug. Then put the wrist of a rubber glove over the jug with the fingers hanging over limply. Secure the glove with a rubber band. Wait. What happens?

Experiment #5:

Fill the 2-liter bottle one-quarter full of water. Drop a few chunks of dry ice into it. Then, add several drops of dish soap to the bottle. What happens?

What have you learned about dry ice from your experiments? If you still have dry ice left, you may want to devise your own experiments. Be sure to ask your parents to help before you try any other science projects!