

# CRYSTAL CAVE

## Wisconsin's Longest Show Cave Educational Program

### Rock Cookie Sorting Activity

#### You will need:

- Rock Cookie recipe and ingredients
- Rock & Mineral samples & hand lenses
- Paper plate, worksheet, & toothpick (for each student or group)

#### Activity:

1. Have students observe various rock and mineral samples using hand lenses. Explain that minerals are the materials that make up rocks and rocks are made of at least 2 minerals but usually are made up of many.
2. Explain that a rock is like a cookie & all the ingredients are the minerals. Show a variety of ingredients. Explain that some "minerals" (ingredients) hold the "rock" (cookie) together (flour, butter, sugar) and others just happened to be in the environment" (your kitchen) when the "rock" formed (nuts, chips, dried fruit).
3. Distribute to each student a rock cookie, paper plate, toothpick and worksheet. Talk about tools of geology while doing this.
4. Have students "pick" the "minerals" out of the rock cookie and sort them on their worksheet.
5. Ask the students to count each type of mineral they have sorted. Then, have them try to identify each type of "mineral" on their worksheet.
6. Optional: Put the data collected from the activity onto a simple poster graph and post in the classroom.
7. Students can eat their "minerals" as well as the "rock" crumbs left behind.

#### Rock Cookies

##### Ingredients:

1 cup butter	½ tsp baking powder
1 ½ cups light brown sugar	¾ cup chocolate chips
½ cup white sugar	¾ cup butterscotch chips
2 eggs	¾ cup white chocolate chips
2 tsp vanilla	¾ cup M & M's candy
2 ¼ cups flour	½ pecans or walnuts (be aware of food allergies)
1 tsp baking soda	½ raisins or other dried fruit

Preheat oven to 350° and grease baking sheets. Cream together butter and sugars. Beat in eggs & vanilla. Combine dry ingredients and gradually add to creamed mixture. Stir in chips, nuts, & dried fruit. Bake for 10-12 minutes.

# Rock Cookie Mineral Sort Worksheet
