

Make Your Own Sculpture Dough


from **Celebrating Chemistry**



Sculptures can be made from many different kinds of substances or combinations of substances. One of these materials is clay. Clay can be made to have different qualities by changing the ingredients. It can be harder or softer and can have different colors. This is a recipe for one type of material that can be molded easily that is similar to the clay artists use for their work.

Materials

Flour
Salt
Cornstarch
Vegetable oil
Food coloring
Water
2 plastic cups
Spoon
Measuring spoons
Plastic bag (for storage)

 **SAFETY:** Be sure to follow Milli's Safety Tips and do this activity only with adult supervision! Do not drink any of the liquids used in this activity. Eye protection must be worn by everyone performing this activity.



Where's the Chemistry?

When materials are mixed together, the combination that is produced sometimes acts differently than the individual ingredients do. Even though the identities of the ingredients used to make the sculpture dough have not changed, the mixture of the materials behaves in a new way.



Procedure

1. Place 4 teaspoons of water in a small cup. Add 4 drops of food coloring and 2 teaspoons of salt and mix well with the spoon until as much salt dissolves as possible.
2. Place 4 tablespoons of flour in a different small plastic cup. Add 1 teaspoon cornstarch and 2 teaspoons of vegetable oil.
3. Add the colored salt water from Step 1 to the materials in the cup from Step 2 and mix well with the spoon.
4. Take the material out of the cup and knead it back and forth between your hands until it is smooth and pliable. (It may be a little oily, but this will keep it moist when stored in a plastic bag.)
5. Shape and sculpt the clay.
6. Clean up the work area and thoroughly wash your hands.



The American Chemical Society develops materials for elementary school age children to spark their interest in science and teach developmentally appropriate chemistry concepts. The *Activities for Children* collection includes hands-on activities, articles, puzzles, and games on topics related to children's everyday experiences.

The collection can be used to supplement the science curriculum, celebrate National Chemistry Week, develop Chemists Celebrate Earth Day events, invite children to give science a try at a large event, or to explore just for fun at home.

Find more activities, articles, puzzles and games at www.acs.org/kids.

Safety Tips

This activity is intended for elementary school children under the direct supervision of an adult. The American Chemical Society cannot be responsible for any accidents or injuries that may result from conducting the activities without proper supervision, from not specifically following directions, or from ignoring the cautions contained in the text.

Always:

- Work with an adult.
- Read and follow all directions for the activity.
- Read all warning labels on all materials being used.
- Wear eye protection.
- Follow safety warnings or precautions, such as wearing gloves or tying back long hair.
- Use all materials carefully, following the directions given.
- Be sure to clean up and dispose of materials properly when you are finished with an activity.
- Wash your hands well after every activity.

Never eat or drink while conducting an experiment, and be careful to keep all of the materials used away from your mouth, nose, and eyes!

Never experiment on your own!

For more detailed information on safety go to www.acs.org/education and click on "Safety Guidelines".

