



Activity # 2 - Cornstarch Creations

Background Information: In the kitchen, cornstarch is most often used as a thickening agent for sauces, gravies, glazes, soups, casseroles, puddings, pies and other desserts. Cornstarch is made by removing the starches in the endosperm found at the center of a corn kernels. The starches are removed, rinsed, dried and milled into a fine powder. This white, chalky powdery substance is used for culinary, household, medical and industrial purposes. Cornstarch is versatile and finds many uses in industry such as adhesives, in paper products, as an anti-sticking agent, and textile manufacturing. It has medical uses as well, such as to supply glucose for people with glycogen storage disease.

Introduction: In Activity #2 Cornstarch Creations, there are three different things you can make - Cornstarch Putty, Cornstarch Slime, and Mysterious Mud. Have fun!

Cornstarch Putty

Supplies Needed:

- Small mixing bowl
- Measuring spoons
- Wooden spoon
- Cornstarch
- Dish soap
- Plastic resealable bag



What to Do:

1. Gather supplies.
2. Measure 2 Tablespoons of cornstarch and put into mixing bowl.
3. Measure 2 teaspoons of dish soap and add to the mixing bowl. The putty will be the color of the dish soap.
4. Mix the cornstarch and dish soap together using the wooden spoon. Keep mixing until all of the cornstarch is mixed completely with the dish soap. It will take a while to mix.
5. Remove mixture from the bowl and with your hands you can squeeze and shape the putty.
6. You can store the putty in a plastic resealable bag.

Cornstarch Slime

Supplies Needed:

- Mixing bowl
- Measuring cups
- Wooden spoon
- Rubber scraper or spatula
- Cornstarch
- White glue
- Food coloring (any color)
- Storage container





Activity # 2 - Cornstarch Creations

What To Do:

1. Measure 1/4 Cup glue and put into the mixing bowl. Use a rubber scraper to get all of the glue out of the measuring cup.
2. Add 5-6 drops of food coloring.
3. Mix the glue and food coloring until smooth.
4. Add 1/2 Cup cornstarch and mix well. The mixing process will take some time and it may seem as though you have too much cornstarch. Use the wooden spoon to keep mixing to combine the cornstarch with the glue. Once it starts to form a ball, remove it from the bowl and knead it with your hands. The more you knead and work the mixture together, it will eventually reduce the stickiness.
5. Store in an airtight container.

Note: If you add less cornstarch, you will get a more liquid consistency. Adding more cornstarch will make a harder slime.

Mysterious Mud

Introduction: Do you like to combine things and watch what happens? Do you like to touch things and see how they feel? Do you know what a suspension is?

Supplies Needed:

- Mixing bowl
- Measuring cups
- Wooden spoon
- Cornstarch
- Water
- Food coloring (any color)
- Storage container or resealable plastic bag



What To Do:

1. Gather supplies.
2. Measure 1/2 Cup cornstarch and put in bowl. The cornstarch should be a level 1/2 Cup. (*See picture above*)
3. Add 1/4 Cup water.
4. Mix cornstarch and water thoroughly. It will be a little difficult to get the cornstarch and water mixed.
5. Stir in 3-5 drops of food coloring and mix.
6. **Play with your "mysterious mud". Touch it. Squeeze it. Roll it.**
7. Describe the mixture. What happens when you pick it up? What happens when you use the wooden spoon and press against the mixture?

Activity Summary:

The cornstarch and water did *not* form a *solution*. The solid particles are held up by the water molecules, but not dissolved in them. This is called *suspension*. Squeezing keeps the suspension together and it feels solid. When you stop squeezing, the liquid and solid begin to come apart and the suspension starts to look and feel like a liquid.

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