

Cornstarch Suspension



Illinois Learning Standards: 12.A.2a; 15.A.2a; 15.D.2b

Illinois Assessment Framework: 12.4.03; 12.4.04; 12.4.05

Materials:

- ✓ 1 cup cornstarch
- ✓ Mixing bowl
- ✓ ABOUT 1/2 cup water
- ✓ Spoon
- ✓ Pie plate
- ✓ Food coloring (Optional)

Directions:

1. Empty 1 cup of cornstarch into a large bowl.
2. Stir while you add water SLOWLY -- don't add all of it if you don't need to. You need the consistency of thick pancake batter. It's better to add too little water than too much. Take your time!
3. Add a few drops of food coloring. (Optional)
4. Stick your hands in the mixture. Record what it feels like. What happens when you try to roll some into a ball and then leave it alone?
5. Pour water into a pie plate. Smack it with your hand record what happens.
6. Empty the pie plate. Pour the cornstarch mixture into a pie plate smack it with your hand and record what happens. Does it act differently than the water?
7. What Happened: When we talk about "states" of matter, we usually talk about the three types: **solid** (like a rock), **liquid** (like water) and **gas** (like the air we breath).

Explanation: A mixture of cornstarch and water make what is known as a suspension. When you squeeze a Cornstarch Suspension it really feels like a solid because its molecules line up. But it looks like a liquid and acts like a liquid when no one is pressing on it because the molecules relax. This is another state of matter, called a suspension (It can act like a liquid, or, when pressed like a solid.).