



# SENSES



## AT-HOME ACTIVITY

### OUBLECK or CORN STARCH GOO

Get ready for some MESSY science fun! It is time to make some cornstarch goo!

#### What your will need:

- Cornstarch.
- Water
- Food coloring
- A large bowl

#### What to do:

- Pour the cornstarch in a bowl. Put your hands in. Feel the cornstarch. How is it different from other powder?
- Now lets add some water (if you are using food coloring add it to the water before mixing it to the cornstarch). There is no exact amount of water, but you will need about 1/2 of water per cup of cornstarch. Add the water slowly and mix it as you add the water. Have fun, use your hands and really mix it! Add enough water so that the mixture flows on its won when mixed. You know you have enough water if you grab a handful of goo and can roll it into a ball -- but watch out if you stop rolling it will “melt” away!
- At just the right consistency, a handful of fluid will dribble out of your hand and solidify if you squeeze it. It will flow again soon after being released.
- Play with the goo! Punch it or hit it with a mallet, it doesn't splash. Slowly sink your hand into it and try to pull your hand out quickly. Notice that the goo does not move if you hit it quickly. Squeeze it hard and see what happens. EXPLORE!
  - How long can you get the strands of goo to drip?
  - What happens if you let the goo sit on the table for a minute and then try to pick it up?
  - How does it feel?
  - Hows does it move?
  - How is oobleck like a fluid? How is it like a solid?
  - Try bouncing a ball on the surface of the cornstarch. You get the idea – explore!

### SCIENCE OF OUBLECK

Solids have definite shape but a fluid can change shapes because it flows. Oobleck isn't a fluid all the time (it is a suspension). If you apply a force to it by smacking or squeezing it this fluid will become a solid. The explanation for the strange behavior of Oobleck lies in the shape of cornstarch particles, which are long and thin. When cornstarch mixes with water, the starch does not dissolve, but remains in suspension. Move the mixture slowly, and the particles slide past each other. Move it quickly, and the particles tangle with each other so that the mixture hardens.