Oobleck!

Oobleck Free Play Station:

1. Run your fingers through the oobleck and let it drip off. See how it acts like a liquid?

2. Now scoop up some oobleck and squeeze it. What happens? Does it still feel like a liquid?

3. What happens if you smack the pan of oobleck with the palm of your hand? Does it splatter like liquid?

4. What happens if you just place the palm of your hand on the oobleck? Does it act like a solid?

Oobleck-y Feet:

1. Run across the oobleck! Quick like a bunny!

2. Dance on the oobleck, fast fast fast!

   Don't walk slowly or you will sink in!!

What's going on??

"All fluids have a property known as viscosity—this describes how the fluid flows, but you can think of it as how thick or thin a fluid is. For instance, honey is much thicker (or more viscous) than water. When a fluid's viscosity is constant it is referred to as a Newtonian fluid.

Oobleck is an example of a fluid whose viscosity is **not** constant. The oobleck changes depending on how you interact with it. If you poke it hard with your finger or hand (scientifically speaking, if you apply a large force) it becomes *very* viscous and stays in place. But, if you gently pour it, applying only a little force, it will flow like water.

Oobleck becomes more viscous when agitated or compressed. When sitting still, the granules of corn starch are surrounded by water. The surface tension of the water keeps it from completely flowing out of the spaces between the granules. The cushion of water makes it slippery and allows the granules to move freely. But, if the movement is abrupt, the water is squeezed out from between the granules and the friction between them increases dramatically, which makes it more solid."

- From Imagination Station Toledo