

"You've Been Slimed!"

Slime is something most adults try to avoid at all cost, but children just can't seem to get enough of it. They love the way it oozes through your fingers, feels cool and slippery and makes people say "eeeww." It excites and repulses all at once. Believe it or not there is a whole lot we can learn from the icky-ness of slime! Here are a few activities for the not so easily "icked-out."

Materials:

1 16 oz. box of cornstarch 2 Small plastic cups
1 cup of water 1 sandwich baggie
Mixing bowl and spoon

Mix the ingredients in a bowl; make sure your child helps measure and pour. Now, sit back and just allow your child to play – to observe and discover. Ask your child to describe the color, texture, shape, smell and other properties of the substance.



After your child has had ample time to explore freely, you can conduct the following experiment:

What is a solid? What is a liquid?

Children as young as five have a basic understanding of the difference between a solid and a liquid -- usually they will describe a solid as "hard" and a liquid as "water." This experiment will introduce your child to more of the properties of solids and liquids as well to a new substance, a colloid.

For both adults and children, here is a list of properties of a liquid and of a solid.

Properties of a solid:

- Does not change shape easily
- Will not allow another solid to pass through it easily
- Is usually visible
- Has a definite shape
- Has a definite size
- Becomes liquid when heated
- Remains solid when cooled

Properties of a liquid:

- Changed shape easily (takes the shape of the container)
- Will allow a solid to pass through easily
- May be visible or invisible
- Has a definite size (volume)
- When heated becomes gas
- When cooled becomes solid

Is the slime more like a liquid or a solid?

Here are several tests you can do on the slime you made to find out. Record your answers on a bar graph -- use one color for liquids, and another for solids.

1. Conformity Test -- Pour the slime into a sandwich baggie. Does it keep its original shape?

2. Finger Poke Test -- Pour some slime into a cup. Try to poke your finger through the slime and touch the bottom of the cup.
3. Pour Test -- Try to pour the slime from one cup to another.
4. Bounce Test -- Hold the slime above the table and drop it. Does it bounce?
5. Shatter Test -- Put the slime in some waxed paper and hit it hard.
6. Shape Test -- Try to form a ball with the slime. Check to see if it holds its shape for five seconds.
7. Heat Test -- Heat a small portion of the slime on the stove.
8. Cool Test -- Now allow the slime to cool.

More Learning:

Slime is actually a colloid, which is a substance that displays the properties of both a liquid and a solid. This is because of the size of the particles of a colloid, which are large molecules or clumps of small molecules. The colloidal particles are small enough to move about randomly like the particles of a liquid. But they are also large enough to be bombarded by molecules of the surrounding medium equally on all sides with the result that they do not move much, thus resembling the properties of a solid. (AIMS Education Foundation, July/August 1991)