Pudding Slime

Celebrate National Vanilla Pudding Day by making a vanilla-scented slime and exploring the states of matter.

Collect

Instant vanilla pudding mix
Cornstarch
Warm water
Bowl
Vanilla extract
Cup (optional)

Make your slime.

1. Mix 1/4 cup of instant vanilla pudding mix and 1/2 cup of cornstarch in a bowl.
2. Add 2/3 cup of warm water and 2 teaspoons of vanilla extract to the mix and stir well.
3. Slowly add in another 1/2 cup of cornstarch and continue to mix until it starts to look like dough.
4. Scrape the dough out of the bowl and knead it by hand for about three minutes.

**Note: Even though this is a non-toxic slime, we don't recommend eating it as it will not taste very good. Instead, try some fun experiments with it!*

Perform some experiments.

5. Roll your slime in a ball, place it in a cup and wait a minute or two. Does it hold its shape or take the shape of the container?
6. Tip the cup over and try to pour the slime out. Does it stay in the cup or flow out?
7. Roll your slime into a ball and try to bounce it against a table. Does it bounce?
8. Hold your slime with both hands and slowly pull it apart. Does it stretch?
9. Hold your slime with both hands and quickly pull it apart. Does it break?
10. Draw a conclusion. Is your slime a liquid or a solid?

How does it work?

You may have found that your slime has properties of both solids and liquids. Solids hold their shape, like when you rolled your slime into a ball. Liquids take the shape of their containers, like the slime when left alone in the cup. Solids can be broken or ripped apart, like when you quickly pulled the slime apart. Liquids are able to flow and stretch, like when you slowly pulled the slime apart. So, is it a solid or liquid?

Pudding is neither a solid nor a liquid, but a colloid. A colloid is a mixture of substances that are tangled together and do not separate. Your pudding slime contains solid starch molecules (which help thicken the pudding) tangled up with liquid water molecules. This allows the slime to act as both a solid and a liquid. Other examples of colloids are oobleck, milk, and ketchup.