



# brains on!

## CURIOSITY KIT: SCIENCE OF SLIME

### ACTIVITY OBJECTIVE:

Kids will be able to get their hands on slime in new ways by trying out a new recipe they might not have the resources to do at home.

### MATERIALS/SETUP:

\*Ingredients are safe, but be cautious, especially if using Borax or laundry soap, which can irritate skin or cause allergic reactions. Keep ingredients away from eyes, mouth, and nose.

Portable speaker and device to play the episode

Reusable containers or bags for storage of slime (for the kids to take it home)

Measuring cups

Mixing bowl

Spoon, spatula or craft sticks

#### For magnetic slime:

Washable white school glue (½ cup)

Water (½ cup)

Black iron oxide powder (red iron oxide will not work, but iron filings are an alternative) (½ cup)

Neodymium (rare earth) magnets (other magnets will not work)

Liquid starch (½ cup) (borax can be substituted, 1 tsp mixed into the water)

#### For glow-in-the-dark

Clear, washable, PVA school glue (½ cup)

Water (½ cup)

Baking soda (for firmness, ½ tsp)

Glow-in-the-dark pigment powder (½ Tbsp)  
(Glow-in-the-dark paint is an alternative)

Saline solution (with sodium borate and boric acid) (1 Tbsp)

#### For color-changing

Add photochromic pigment powder to basic slime recipe

### INSTRUCTIONS:

(Consider doing the activities while listening to the podcast.)

#### Magnetic slime:

1. Add black iron oxide powder to the glue and water mixture. Adults should supervise the mixing as it is messy.
2. Add the liquid starch. Stir until it easily pulls away from the bowl.
3. Use a neodymium magnet to play with the slime, including allowing the slime to “devour” the magnet or making mini volcano peaks.

#### Glow-in-the-dark slime:

1. Add baking soda to glue and water mixture.
2. Add glow powder and mix well.
3. Add saline solution. Stir until it easily pulls away from the bowl.
4. “Charge” the slime with a bright light. Bring it to a dark space to see it glow.

#### Color-changing UV-activated slime:

1. Measure and add the photochromic pigment powder into your glue and water mixture. Adults should supervise the measuring and mixing as it is messy. Stir well.



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2. Add the activator (saline, starch, or borax). Stir until it easily pulls away from the bowl.
  3. Bring into the light to see the colors change.
- Give washable markers to the kids to write on white slime.

### QUESTIONS ADULTS CAN ASK:

(Don't forget to keep your hands off the project!)

- Is slime a liquid or a solid?
- Are some slimes stickier than others? Can you test the stickiness? How?
- How do you make slime more stretchy?
- For magnetic slime: Why doesn't the magnet pull out the iron oxide powder?
- For glow-in-the-dark slime: What makes it glow?
- For color-changing slime: Does the color change for all of the slime? If not, why is the inside still the original color in sunlight?
- Would you wear clothes made out of slime? (Learn more about Hagfish Slime! <https://www.youtube.com/watch?v=t8sw8BN-Xq0>)

### ADAPTATIONS ADULTS CAN OFFER:

- Fluffy slime, clear "glass" slime, heat-sensitive slime, erupting slime, literacy slime (with abc beads added), edible slime, crunchy slime, and more...
- Take a time-lapse video of the creation of the slime. If doing the magnetic slime, take slow-motion video of it hopping to the magnet.

### ADDITIONAL RESOURCES:

#### WEBSITES:

<https://littlebinsforlittlehands.com/how-make-slime-chemistry-kids/>

<https://www.steampoweredfamily.com/activities/slime-stem-activities-learning-with-slime-stem-and-fun/>

<https://www.stevespanglerscience.com/lab/experiments/magnetic-slime/>

#### BOOKS:

*Ultimate Slime: DIY Tutorials for Crunchy Slime, Fluffy Slime, Fishbowl Slime, and More Than 100 Other Oddly Satisfying Recipes and Projects—Totally Borax Free!*

by Alyssa Jagan

*Germ: Fact and Fiction, Friends and Foes*  
by Lesa Cline-Ransome