

# A SLIMY SITUATION

JUNIOR SCIENCE OLYMPIAD | TESTING WHICH COMBINATION OF INGREDIENTS MAKES THE BEST SLIME

## OBJECTIVE

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Slime requires three ingredients: borax, glue, and water. Simple! Now, we need to figure out which combination of three things makes the best slime.

## SKILLS

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No skills needed! However, listen to the instructors. Be sure to wear the proper safety attire like gloves.

## INSTRUCTIONS

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### OVERVIEW

Today we have presented you all the ingredients to make slime: borax, glue, and water. However, it is your job to determine which combination of these three ingredients makes the best slime. Should you add more water? Should you add more borax? Follow the trials below, make three sets of slime, and you let us know which trial works the best!

### DIRECTIONS

For all 3 trials, you will be given a bowl to mix your ingredients. First, mix your ingredients with a wooden stick, and when the slime starts to thicken, take it out and knead the slime with your hands (wear gloves!). Keep kneading the slime until it's perfect!

## TRIALS

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### TRIAL ONE

1 oz. glue ( $\frac{1}{4}$  of the bottle),  $\frac{1}{4}$  cup of water,  $\frac{1}{4}$  cup of borax

### TRIAL TWO

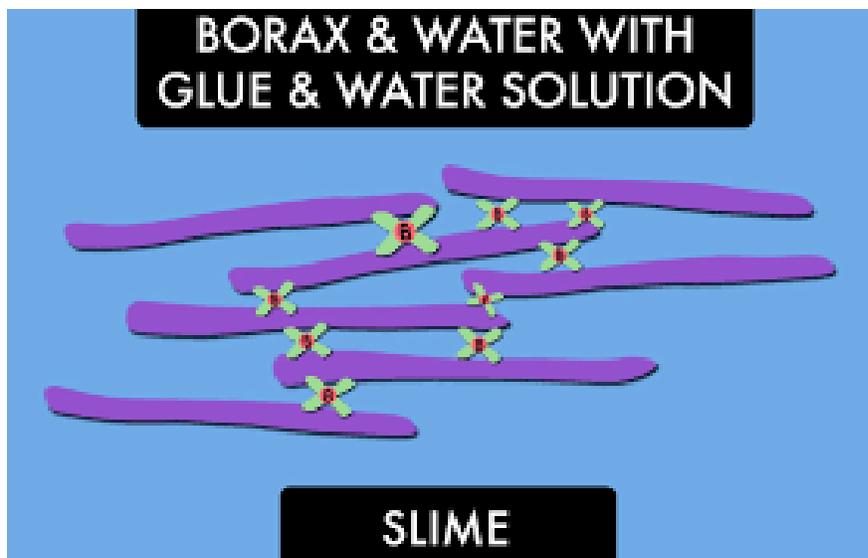
2 oz. glue ( $\frac{1}{2}$  of the bottle),  $\frac{1}{4}$  cup of water,  $\frac{1}{4}$  cup of borax-

### TRIAL THREE

1 oz. glue ( $\frac{1}{4}$  of the bottle),  $\frac{1}{4}$  cup of water,  $\frac{1}{2}$  cup of borax

### TRIAL FOUR

1 oz. glue ( $\frac{1}{4}$  of the bottle),  $\frac{1}{2}$  cup of water,  $\frac{1}{4}$  cup of borax



## THE SCIENCE BEHIND THE SLIME

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Glue is made up of long, microscopic strands called **polymers**. These sticky polymer strands attach to surfaces and hold them together. When borax is added to glue, it forms a bridge between the single strands. This forms one connected superstrand, also known as slime!

## QUESTION TO ANSWER

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Which trial produced the most successful slime? Which trial produced the worst slime? Why?