Stay at Home Science

Slime

What You Need

Hot water
Borax
Clear school glue
2 bowls
2 spoons
Liquid water color or Food coloring (optional)

What You Do

1. Mix 1 cup hot water and 1-½ teaspoons of Borax until dissolved. Set your solution aside.
2. Mix 2 cups of clear glue and 2 cups of warm water together in a plastic bowl.
3. Slowly pour the Borax mixture into the glue mixture while stirring quickly. Stir until the mixture leaves the side of the bowl. It will be sticky.
4. Knead the mixture with your hands until it is no longer sticky. The more you work with it the firmer it will become.

Questions to ask

- How did the texture of the slime change as you were kneading it?
- What can you do with your slime?
- Is there anything we could add to the slime? How would that change its properties?

What's The Science?

Slime is created when a polymer (the glue) interacts with a cross-linking solution (the Borax solution). A polymer is made up of very large chains of molecules, called monomers. Glue's molecules slide past each other fairly easily, which is why it is easy to pour. When combined with a cross-linking solution, the molecules bond together in a way that makes it very difficult for them to slide past each other, thus creating slime.

Try This

Use science vocabulary: Use related science words such as solution, polymer, texture, observations, and properties as you talk and play together.

For older children: Add an extra challenge for older children. Allow them to experiment with different glue to water ratios to see how that affects the slime. This slime uses a 1:1 ratio of glue to water, meaning the amounts of glue and water were equal. Try using a 2:1 ratio of glue to water by putting in double the amount of glue as water. Try the opposite by putting in double the amount of water as glue. You can also try using white glue instead of clear. Have them keep a journal of how each slime turns out.

Keep In Mind

- Children are natural scientists; let them lead the way in their experimentation! Encourage them to ask questions and make suggestions only when they are stuck/discouraged.
- The order suggested is not the only right or perfect way. Make adjustments based on the age, ability, and interests of the children.
- Do NOT dispose of slime down the sink. Throw it in the trash can when you are finished with it.
- Store slime in an airtight container.

Additional Resources

The Slime Book: All You Need to Know to Make the Perfect Slime by DK
Slime 101: How to Make Stretchy, Fluffy, Glittery & Colorful Slime by Natalie Wright

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