Early Childhood STEM
Slime Time!

Description

Slime: It's ooey. It's gooey. It's so much fun to play with! This seemingly simple activity isn't only fun, use it to help introduce children to chemical reactions and states of matter at any age.

- Age: 2+
- Time: 20 minutes

Learning Objectives

- Children will identify different states of matter and that materials can react to become a solid, liquid, or gas.

Vocabulary

- Matter: anything that takes up space!
- Solid: an object that is made up of tiny pieces that stick close together. This makes the object stick together and stay in one shape.
- Liquid: an object that is made of tiny pieces that can move around. Because these tiny pieces can move liquids can change shape to whatever container they are put into.
- Chemical Reaction: When solids, liquids, and gases are mixed together sometimes their tiny pieces interact in a special way. This interaction can cause them to become something new!

Materials

- Water (1 ½ cup)
- White glue (½ cup)
- Borax (1 teaspoon)
- Food coloring (optional)
- 2 bowls
- 1 mixing spoon
- 1 ziploc bag or resealable container

Safety Precaution

- Adults should monitor use of materials at all times. Ingesting or swallowing Borax could be dangerous.

Implementation

Introduction

Today we are going to play with different states of matter. Everything in the world is made up of matter--even you and me! Some things are solids. Solids are made up of tiny pieces that stick close together and stay one shape. Some things are liquids. Liquids are made up of tiny pieces that can move around. Liquids can change shape! They can match the container they are put in. When you mix different states of matter together, sometimes you get a chemical reaction. Today we're going to be a special kind of scientist called a chemist and create a chemical reaction!

Procedure

1. In 1 bowl, mix 1 teaspoon borax and1 cup of water. Stir until the borax dissolves.
2. In a separate bowl, mix 1/2 cup (4 oz) white glue with 1/2 cup water. Add food coloring, if desired.

3. Mix the two solutions together into 1 bowl. Stir for 1 minute.
4. Remove the slime from the bowl and continue to "mix" the slime together by hand.
5. Play and have fun!

Questions to Prompt Inquiry

1. What do you notice about the substances in the two bowls? Are they solids? Liquids? How do you know?
2. What do you notice about this substance? Is it a solid or a liquid? How do you know?

Conclusion

What did you learn today about matter? What did you learn about chemical reactions? What surprised you? What do you want to find out more about?

Tips and Suggestions

Activity Extensions

- Leave your slime in different settings (ex: in the sun, in the freezer, in a bowl of water) and see what chemical reactions happen next. Ask your child to compare and contrast the slime in different places.

Adapting to Home/Classroom/Public space

Store your slime in a Ziploc bag or resealable container. Evaporation can cause all the liquid remaining in the slime to disappear which will cause your slime to stiffen.

Learn More!

a. Reading recommendations:
   - What Is the World Made Of?: All About Solids, Liquids, and Gases by Kathleen Weidner Zoehfeld and Paul Meisel
   - Change It!: Solids, Liquids, Gases and You by Adrienne Mason and Claudia Davila