

In this new series from PBS North Carolina, Ava and friends explore the world of science through hands-on experiments. In the episode "Stretch, Squish and Bounce," Ava and Cathal explore the stretchy world of polymers and create slime.

To learn more, visit pbsnc.org/MiniFab.

Slime Experiment

Materials

- ½ cup clear or white glue
- ½ cup water
- Food coloring
- ½ cup liquid starch

- Shaving cream
- Cup or bowl
- Measuring cups
- Spoon or fork

Instructions

- 1. Add glue and water to a bowl or cup and mix well.
- 2. Add one drop of food coloring.
- 3. Add liquid starch and mix well. You'll see your slime start to form.
- 4. Lay your slime on a flat surface and knead for 1 minute.
- 5. Add two squirts of shaving cream and knead for 1 minute.
- 6. You've made your own slime! Great job!

Activity courtesy of the Children's Museum of Atlanta and CampTV.org











NC Foundations for Early Learning & Development (Pre-K)

Cognitive Development (CD)

- CD-1: Children use scientific inquiry and problem-solving skills.
 Hands-on exploration encourages prediction, comparison and cause-effect observation.
- CD-2: Children demonstrate knowledge of physical science.
 Children explore how liquids transform into stretchy solids (polymers) through mixing and kneading.

Approaches to Learning (APL)

- APL-2: Children actively seek to understand the world.
 The sensory and physical change of the slime invites further questions.
- APL-4: Children demonstrate creativity, persistence and problem-solving.
 Slime-making involves experimentation with texture, consistency and stretchiness.

Language Development (LD)

LD-4: Children communicate effectively.
 Children use descriptive language to explain textures and changes.

Emotional & Social Development (ESD)

ESD-6: Children develop relationships and social skills.
 Slime-making promotes shared exploration, turn-taking and group problem-solving.

NC Standard Course of Study: K-3 Alignment—Science

Kindergarten: Physical Science

- K.P.2.1: Compare observable physical properties of different kinds of materials.
 Glue, water and slime are compared by texture, movement and consistency.
- K.P.2.2: Classify objects based on properties.
 Children classify liquids, solids and the "in-between" nature of slime.

Grade 1: Forces & Matter

1.P.2.1: Understand solids and liquids and how they change.
 Children observe the transformation from separate liquids into flexible solids.

Grade 2: Properties & Changes in Matter

- **2.P.2.1**: Understand that solids and liquids can be mixed and changed. The materials' reaction is a vivid example of molecular change—liquid to polymer.
- 2.P.2.2: Compare and contrast the properties of matter before and after mixing.
 Children reflect on how texture, stretch and bounce change with ingredients.

Grade 3: Chemistry & Materials

- **3.P.2.1**: Recognize changes in physical and chemical properties of materials. The slime is a new material with new properties—a classic intro to polymer science.
- **3.P.2.2**: Understand structure-function relationships in materials.

 The way slime stretches or bounces links to properties of polymers and connects to the scientist's description of shoe materials.







