

**Project FOCUS
Best Lessons
FIFTH GRADE**

Title of Lesson: Edible Cookie Cell

Theme: Physical Science

Unit Number: B **Unit Title:** Matter/ Chemical and Physical Changes

Performance Standard(s) Covered (enter codes):

S5P2c

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Changes in state, Physical Properties, Chemical Properties, Mixture, Colloid, Chemical Change, Chemical Reaction, Compound

Learning Activity (Description in Steps)

Abstract (limit 100 characters): Illustrate physical and chemical changes to create slime

Details:

Set up

1. List materials and explain how each will play a role in the experiment.
2. Hand out pre-measured materials to each student.

Provide instructions

1. Before starting experiment review with students what chemical and physical changes and properties are as well as what constitutes a mixture. You can also ask the different states of matter to ensure each student understands this vocabulary.
2. Begin with Borax and water solution by mixing the 1teaspoon of Borax with 1 cup (8oz) of water until all the Borax is dissolved.
3. For the separate solution of water and glue, mix 1/2 cup (4oz) white glue with 1/2 cup (4oz) of warm water until diluted. At this point you can add food coloring to water/glue mixture to add color.

4. Mix Borax/water solution into water/glue solution until they become too hard to stir and most of the liquid is absorbed.
5. Take out of cups and keep kneading until it stiffens up.
6. ENJOYYYYYYY!!!!!!
7. Store slime in a ziploc bag in the refrigerator when not being played with.

Materials Needed (Type and Quantity):

1 & 1/2 cup (12oz) warm water

1/2 cup (4oz) white glue (like Elmer's™)

1 teaspoon borax

2-3 drops of food coloring (unless you want uncolored white slime)

Large cups

Notes and Tips (suggested changes, alternative methods, cautions):

Before doing activity make sure no students have allergies to the materials needed.

Pre-measure each of the materials for the students in order for it to run a lot smoother and everyone can work at the same pace.

Instruct the students to not ingest any borax or slime once they have completed the assignment.

Use one universal color for the class because some students will not be happy with the color they chose after the experiment is over.

In order to make a smaller amount of slime you can half the materials.

Tell students to store slime in ziploc bag in refrigerator when not being played with in order to prevent it from drying out or becoming moldy.

Sources/References:

- 1) Harcourt Science Publishers "Science Grade 5"
- 2)
- 3)