

Activity: Paste *Sticking Together*

Materials Needed:	
Sticking Together Brainstorm Images of objects Glue Glue stick Tape Sticky Tack Cornstarch Baking powder Baking soda Salt Flour Magazines	<i>Sticking Together Materials Exploration</i> <i>Paste is...activity page</i> <i>Best Paste Recipe page</i> <i>Paste Recipe Comparison</i> Paste Recipe Paste Images Cups Spoons Pennies Index cards Popsicle sticks
Literature Used:	
A variety of recipes and recipe books that have different features.	

Preparing for the Activity:

What is paste? a thick, soft, moist substance, usually produced by mixing dry ingredients with a liquid.

Conducting the Activity

ENGAGE:

Begin by asking students, think about the things that you see around the classroom, our school, home, and other places they might go that stick, or are stuck together. Students can draw or write their ideas.

After, students have several minutes to gather ideas, ask them the share out what sticks together.

Show student's images and ask *What do you notice about these images?* Record their ideas on a t-chart. I notice the images are alike/different.

Explain to students that you have several different types of materials that can be used to stick object together. Allow students time to explore each type of material. (You may

want to give a paper plate or large index card for their exploration).

After students explore, have them complete the Sticking Together Materials Exploration graphic organizer, by describing each material. You can also choose to do this whole class.

Once students complete the graphic organizer, conduct a whole class discussion.

Guiding Questions:

How are these materials alike?

How are these materials different?

How might you use these materials to stick objects together?

What instance or scenario might you not want to use one of the materials? Explain

EXPLORE:

Begin by asking the students to stop and jot, *What do you think paste might be? How might paste be similar or different to what you explored? How might someone use paste? What do you know about paste?*

Next, show images of paste. Have students describe what they notice about these images. Ask students how might these images of paste be different than the materials they explored? How might it be similar?

Then pass out recipe books to students in small groups. Students should look through different recipe books and record what they notice about recipes.

After, have students share observations of recipes whole group. As students share, record ideas on chart paper.

Guiding Questions:

What do you notice about recipes?

How do you use them?

What information does a recipe provide?

How are recipes similar and different?

Explain to students that they will be working in small groups to create the best recipe to make paste. Prior to allowing students to explore, highlight ideas that recipes had such as measurements, time, etc. as they create their recipe these may be important ideas to consider. (When thinking about measurements and time it is acceptable for students to say 3 spoons full, or 15 stirs.)

Once students construct a paste substance, have them create a recipe for their paste. You may want to set an expectation that their recipe must have at least 3 ideas from the chart in step 4. Students can use magazine pictures to try their paste and determine if it works.

EXPLAIN:

Once students created their paste, have them describe what they think paste is and how

paste is different than other materials, students can record their thinking using the activity page or you can conduct a whole class discussion.

Have students describe and explain why they believe their recipe is the best paste recipe. Students should create an informative piece of writing, explaining why they believe their recipe is the best.

Provide students with a generated *Paste Recipe*, and have them compare and contrast their recipe with the Paste recipe. They can record their ideas on the activity page.

Allow students to revisit their recipes and make adjustments.

EXPAND:

Provide students with different types of objects and have them explore to see if their paste can hold heavier objects. Such as a lima bean, penny, block, popsicle stick design.

If their paste is not able to hold these objects, have students determine what changes might they make in the recipe.

If their paste was able to hold these objects, how does their paste compare to the paste in the recipe. (You may want to have this paste created for students to try.)

Students can then write and/draw a picture to convince someone to make their recipe, they can record their thinking on the *Convince Me* page.