



OBJECTIVE OF THIS INVESTIGATION:

Children will investigate which materials are best used as paint brushes, given the properties of those materials.

VOCABULARY:

- texture
- rough
- smooth
- soft
- hard
- coarse

MATERIALS:

- paper or other material children can paint on
- paint
- a variety of materials to use as brushes (e.g., bottle cleaning brushes, sponges, toothbrushes, cotton balls, etc.)
- smocks, aprons, ground covering as needed

PROGRESSION STEPS (TOPIC):

Visit [STEMIE Learning Trajectories](#) for details

- Properties Recognizer
- Function Recognizer
- Properties Identifier

THIS INVESTIGATION:

- Lay the materials out in the art area and invite children to examine and touch the materials.
- Ask children to identify the different properties and textures of the materials?

“How does [insert material here] feel?” (Properties Identifier)

- If children do not identify different properties, textures, etc., model doing so. See if children can pick out materials given certain properties.

“Can you find me something to paint with that is soft and squishy? Yes, a sponge is soft and squishy!” (Properties Recognizer)

- Encourage children to explore painting or printing with the different objects and to try out different ways to use them (e.g., rub the toothbrush so the paint sprinkles, squeeze the sponge so the paint drips).

“Which material do you think would be best to paint puffy clouds? Why? What about rain?” (Function Recognizer)

“Which materials soak up the most paint? The least? Why do you think they do that?” (Function Recognizer)

ADAPTATIONS:

See [A Guide to Adaptations](#) for general ideas and strategies

Materials:

- Tape paper to the table for greater stability
- Provide a wide array of graspable materials including ones with long and short handles.
- Adjust the angle of work surface to improve fine motor control using a slant board or DIY slant board





ADAPTATIONS (CONTINUED)

Instruction:

- Create a visual schedule of the steps required to complete the activity if needed (e.g., first dip in paint, then put on paper).
- Provide visual cue cards as both a teaching tool and as a form of communication.

HOW TO CONTINUE THIS INVESTIGATION:

- Encourage children to mix paints and experiment with making new colors (**Properties Recognizer; Properties Identifier**)
- Provide children with pictures of works of art and ask them to think about what materials might have been used to create the pictures and why. (**Function Recognizer**)
- Read *Little Blue and Little Yellow* by Leo Lionni

SUPPORT MATERIALS:



Stiff



Coarse/Gritty



**Crunchy/Crispy/
Brittle**



Hard



Soft



Holey/Spongy



SUPPORT MATERIALS:

Use the blank ones to make your own!



Prickly/Bristly/Spiky



Ridged



Scaly/Scratchy

