

Evaluation Supplemental Materials:

1. Sentence Starters for Planning and Carrying Out an Investigation of Properties of Matter

- a. My investigation is about the property of \_\_\_\_\_ .
- b. For my investigation, students would need to be inside the classroom / outside .
- c. Materials I would need to gather would include: \_\_\_\_\_  
\_\_\_\_\_.
- d. The activity that I would have students do would be: \_\_\_\_\_  
\_\_\_\_\_.
- e. In would know students were doing the investigation appropriately if I saw \_\_\_\_\_  
\_\_\_\_\_.

2. Rubric for having students design their own soils investigation

Criteria	3	2	1
Location of soil sample	Student suggested an appropriate new place to obtain a soil sample	Student suggested an area to obtain a soil sample that was already used in the previous investigation	Student could not come up with a place to obtain a soil sample
Collecting and drying the sample	Student was able to describe how to dig and collect a soil sample and how to dry it	Student was able to describe either how to dig and collect a soil sample or how to dry it	Student was unable to describe how to collect or dry the sample
Sieving soil sample	Student was able to describe how to use a soil sieve such as how to place samples in the top and shake and that particles would be divided in pans by different sizes	Student was able to describe how to use a soil sieve such as how to place samples in the top and shake or that particles would be divided in pans by different sizes	Student was not able to describe how to use a soil sieve such as how to place samples in the top and shake and that particles would be divided in pans by different sizes
Explanation of soil properties	Students were able to define and describe properties of texture and color	Students were able to define either soil texture or color	Students were unable to describe soil texture and color
Grain sizes	Students were able to describe the difference in texture (feeling) between large (gravel), medium (sand), and small (silt/clay) size grains	Students were able to describe the texture (feeling) of one grain size such as: large (gravel), medium (sand), and small (silt/clay) size grains	Students were unable to describe any textures of grain sizes.
Importance of soils	Students were able to explain at least two reasons why soils are important such as nutrients for growing plants, as home for organisms, and holding water	Students were able to explain a reason why soils important such as nutrients for growing plants, as home for organisms, and holding water	Students were unable to explain any reasons why soils are important.