

What's the Matter?

Find out what's happening with matter as we explore the water cycle, measure chemicals undergoing a change, and create new substances!

SUMMARY:

Students will be introduced to the water cycle and get to see evaporation, transpiration, condensation, precipitation and runoff in action. They will create a chemical reaction to see how it affects the sum weight of the parts involved. They will use different chemicals to create a fun new substance to take home.



EDUCATIONAL VALUE:

Students know that the sun provides the energy that is a driving force for most biotic and abiotic cycles on the surface of the earth. Students know that the sun's energy fuels the water cycle and impacts different aspects of the water cycle (evaporation, transpiration, condensation, precipitation). Students know that the weight of an object is equal to the weight of the sum of its parts. This is true in all closed systems. Students know that by making qualitative and quantitative data records, we are able to create before/after representations of materials (and their properties), so that we can compare before/after versions of materials.

TAKE-HOME MESSAGE:

- 1 The water cycle is fueled by the sun and is the driving force behind most biotic and abiotic cycles on the earth's surface.
- 2 The weight of an object is equal to the weight of the sum of its parts.
- 3 Making qualitative and quantitative records is necessary to compare materials before and after reactions.

TAKE-HOME PRODUCT:

Mad Science® Snowball Slime



North Carolina Essential Standards:

Understand the interactions of matter and energy and the changes that occur.

- 5.P.2.1 Explain how the sun's energy impacts the processes of the water cycle (including, evaporation, transpiration, condensation, precipitation and runoff).
- 5.P.2.2 Compare the weight of an object to the sum of the weight of its parts before and after an interaction.
- 5.P.2.3 Summarize properties of original materials, and the new material(s) formed, to demonstrate that a change has occurred.