Crosscutting Concepts

Scale, Proportion, and Quantity

- Natural objects exist from the very small to the immensely large. (5-PS1-1)

  Students develop an understanding that the molecules in water interact with the molecules of baking soda and cream of tartar in baking powder to produce carbon dioxide gas. So students see that their macroscopic observations of the production of a gas can be explained on the sub-microscopic molecular level.

Cause and Effect

- Cause and effect relationships are routinely identified, tested, and used to explain change.

  Students use molecular-level models to explain how the interactions of molecules in water with the molecules in the components of baking powder causes the production of carbon dioxide gas.