



## Science and Engineering Practices

### Developing and Using Models

- Develop a model to describe phenomena (5-PS1-1)

*Students use molecular model animations to help visualize and develop an understanding that atoms are not made or destroyed in processes like state changes, dissolving, and chemical reactions.*

## 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 macroscopic observation that the weight of substances does not change in state changes, dissolving, and chemical reactions is based on atoms changing position and arrangement but not on being created or destroyed.*

### Cause and Effect

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

*Students develop an understanding that the interactions of molecules and atoms in state changes, dissolving, and chemical reactions causes observable changes but that the total weight of the substances does not change.*