Benchmark SC.5.P.9.1

Reporting Category	Physical Science
Standard	**Big Idea 9** Changes in Matter
Benchmark	**SC.5.P.9.1 Investigate and describe that many physical and chemical changes are affected by temperature. (Also assesses SC.3.P.9.1 and SC.4.P.9.1.)**
Also Assesses	**SC.3.P.9.1** Describe the changes water undergoes when it changes state through heating and cooling by using familiar scientific terms such as melting, freezing, boiling, evaporation, and condensation. **SC.4.P.9.1** Identify some familiar changes in materials that result in other materials with different characteristics, such as decaying animal or plant matter, burning, rusting, and cooking.
Benchmark Clarifications	Students will describe how physical and/or chemical changes are affected by temperature. Students will describe the physical changes water undergoes as it is heated and/or cooled. Students will describe how some familiar changes in materials result in other materials with different characteristics.
Content Limit	Items will not assess particle motion in changes of states of matter.
Stimulus Attributes	None specified
Response Attributes	None specified
Prior Knowledge	Items may require the student to apply science knowledge described in the NGSSS from lower grades. This benchmark requires prerequisite knowledge from SC.K.P.9.1 and SC.2.P.9.1.

Sample Item 14 **SC.3.P.9.1**

One morning, Ryan noticed there were tiny drops of water on the grass as he walked to school. That afternoon, he did not see any drops of water on the grass when he returned home. Which of the following **best** explains what happened to the drops of water?

A. The heat from the air caused the water drops to boil.
B. The air cooled the water and caused the drops to freeze.
★ **C.** The Sun heated the water and caused the drops to evaporate.
D. The energy from the Sun caused the water drops to condense.