

## Goals and Assessment

Clarify that the goals indicate what students should understand and be able to do as a result of the activity. Make sure students understand that Chapter Assessments are based upon these goals.

| Goal  | Location in Activity  | Assessment Opportunity   |
|---|---|--|
| Measure the amount of dissolved gas in a carbonated beverage.                                 | <b>Investigate</b><br>Questions 1 – 4   | Experimental design and results provide an opportunity to evaluate inquiry skills and understanding of inquiry.                      |
| Understand that volcanoes emit gases such as water vapor, carbon dioxide, and sulfur dioxide. | <b>Digging Deeper</b><br><b>Check Your Understanding</b><br>Questions 1 – 2   | Correct responses require understanding that volcanoes are a source of gases within the atmosphere.                                  |
| Describe how volcanoes are part of the hydrosphere and water cycle.                           | <b>Digging Deeper</b><br><b>Check Your Understanding</b><br>Question 3  | Response provides evidence about awareness of the movement of water through volcanoes.   |
| Demonstrate awareness of how volcanoes can affect global temperatures.                        | <b>Digging Deeper</b><br><b>Understanding and Applying</b><br>Question 2  | Students demonstrate their awareness by considering how a large eruption might impact global temperatures.                           |
| Recognize that volcanoes are part of interactive systems on Earth.                            | <b>Digging Deeper</b><br><b>Check Your Understanding</b><br>Questions 3 – 5<br><b>Understanding and Applying</b><br>Questions 1 – 2 and 4<br><b>Preparing for the Chapter Challenge</b> | These questions provide multiple opportunities to assess students' understanding and awareness of volcanoes within the Earth system. |