

# Types of GLOBE Weather Assessments

## EMBEDDED PRE-ASSESSMENT

The table below outlines two opportunities for pre-assessment in Lesson 1 and suggests what evidence of student thinking and prior knowledge to look for during the lesson.

LESSON 1 PRE-ASSESSMENT OPPORTUNITIES:	LOOK FOR:
<p><b>1</b> Teacher Guide: 3-4 of “Introduce the Anchoring Phenomenon”</p> <p>(Student: Lesson 1, Step 1)</p>	<ul style="list-style-type: none"> <li>words and scientific terms they use to describe the water cycle (e.g., evaporation, precipitation and condensation) or expression of these ideas without using these terms.</li> <li>whether they focus mostly on water moving places or whether they also include sunlight, heat, temperature, or other references to energy.</li> </ul>
<p><b>1</b> Teacher Guide: 1 of “Modeling Storm Formation”</p> <p>(Student: Lesson 1, Step 3)</p>	<ul style="list-style-type: none"> <li>the water cycle processes students include in their diagram (e.g., evaporation, condensation, precipitation).</li> <li>whether they use water molecules or a generic macroscale representation of water in their drawing.</li> <li>whether they include references to sunlight, heat, or energy as a mechanism for moving water around the water cycle.</li> </ul>

## FORMATIVE ASSESSMENT

Each lesson includes a variety of opportunities for formative assessment that correspond to particular parts of the instruction. The table (pages 3-5) summarizes notable formative assessment opportunities focused on three-dimensional learning outcomes that are tied to each lesson and work toward the NGSS Performance Expectations for the unit. Also, Exit Tickets, used at the end of each lesson to inform your instructional decision-making for the subsequent lesson, are listed in the table.

## LEARNING SEQUENCE SUMMATIVE ASSESSMENTS

Each learning sequence has a corresponding summative assessment (pages 7-17) composed of open response questions that prompt students to use their knowledge of disciplinary core ideas and crosscutting concepts as well as engage in the science practices of data analysis and interpretation and modeling. You can use the provided interpretive answer keys to make sense of student learning and to identify productive thinking and counterproductive, incomplete, and inaccurate ideas. The interpretive answer keys suggest where you can revisit instruction based on incomplete and inaccurate student thinking.

## FINAL ASSESSMENT

Intended for the end of the unit, the final assessment (pages 18-21) targets fundamental science ideas learned in the unit as well as the NGSS science practices of data analysis and interpretation and modeling. The assessment also prompts students to share what they know about the NGSS crosscutting concepts of patterns and cause and effect.