

Questions to Elicit Evidence of Student Learning

Learning Target	Questions	Purpose
I can describe erosion and how it is measured.	What is erosion, and how is it measured?	Teachers pose this question to student pairs for dialogue. Teachers eavesdrop on the dialogue and then wrap up the discussion with a minilecture on erosion and how it is measured.
I can describe weathering and how it affects the earth. I can describe erosion and how it is measured.	What is the difference between weathering and erosion?	Teachers use this as an exit ticket to check for understanding on the concept of erosion. All students must understand this concept in order to interpret and make predictions. Teachers talk to individual students who do not master the concept.
I can interpret data from maps to describe patterns and changes in the earth.	Compare the interpretation statements you made with those of your partner's. How are they the same and different?	Teachers can use this activity to find out if students understand interpretation and can read a map. Through student dialogue and interpretation, teachers see who can identify what the maps actually say, who can make statements that show relationships (clear evidence they can interpret), and who can draw conclusions or think like a scientist.
I can use data interpreted from maps of the earth to describe changes over time.	How do interpretation statements help us understand how the earth has changed over time?	Students work in collaborative groups to discuss this question. To make predictions, teachers check whether students can see the changes and patterns that emerged over time. They may even generate a model to represent the changes.
I can use what I know about the earth's features and how they change to identify problems, make predictions, and pose solutions.	Why are erosion and weathering a threat to the earth? Back up your thinking with evidence from our readings and investigations.	In groups of three, students explore this question and identify evidence. The teacher collects the questions that arise and uses them to encourage further thinking as students engage in small-group dialogue.
I can use what I know about the earth's features and how they change to identify problems, make predictions, and pose solutions.	What questions might a scientist ask to try to predict the impact of erosion on the earth over the next two hundred years?	Teachers use these questions to determine the level of understanding students have about how the earth is changing. Teachers use surface-level questions to show students how to trace the data. They use deeper-level questions to generate dialogue in the classroom.

Source: Adapted from GLOBE Program, n.d.