

Erosion Inquiry
OCEP -2012

1. Select a nearby outdoor site for your study. You may choose the schoolyard or natural habitats adjacent to the school. Ideally, this will be a place that students can visit repeatedly for other outdoor classroom studies.
2. Before heading out, assess prior knowledge from learners to determine if they can already think of places where erosion is occurring in the schoolyard. Make predictions of where erosion may be occurring.
3. Visit the site and gather information:
 - a. Note areas of the site where erosion is occurring. Identify characteristics that indicate erosion.
 - b. Determine the cause of the erosion, if possible.
 - c. Plot the locations on a map.
4. Focus Questions: Is there a relationship between erosion sites and
 - a. Water volume?
 - b. Water speed?
 - c. Incline?
 - d. Vegetation cover?
 - e. Substrate type?
5. Select one of the variables above and design a simple experiment that could answer that question.
 - a. Make a prediction.
 - i. Example #1: Greater volumes of water running over land lead to greater amount of erosion.
 - ii. Example #2: Greater amounts of vegetation cover leads to reduced amounts of erosion.
 - b. Test the hypothesis. Isolate confounding variables.
 - i. Use models in the classroom
 - ii. Survey a new area to see if findings match hypothesis
 - c. Analyze and graph data,
 - d. Make a conclusion:
 - i. Did the data support the hypothesis? Why or why not?
 - ii. What new questions do you have about erosion?