

Putting it all together

Qualitative/Quantitative Observations

Overview: Students use four of their five senses as they describe and quantify characteristics of natural objects or conditions in nature. The lesson integrates math, science and language arts.

Materials: Journals, pencils and LookIts for each student

Time: 15 – 20 minutes

Action:

- Students are assigned or select a favorite site to make observations.
- The top of their journal page should be a T-chart to record two columns of observations.
- They are to make 10 Qualitative observations that contain adjectives describing physical characteristics of the site or a natural object (such as a plant) in the site.
- In addition, they are to make 10 Quantitative observations that involve numbers: counting, measuring or estimating.
- Observations should include a simple sketch with labels.
- Students should use all senses except taste.
- At the bottom of the data columns, they should list at least one question and any surprises.

Management Strategies:

- Circle UP and discuss observations. Share any surprises.
- What math data did students collect? How can it be used?
- Testable Questions: To enhance the science experience, discuss the questions students asked. How can they be answered -- by literature search or by a scientific investigation? Which are testable questions? Is there a question here that students would like to test as a group or individually?

