

Lesson 6: A Lesson on Nature Note Taking

Teach your students the art of recording observations in the field.

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A scientist's journal goes by many aliases—nature journal, field notebook, or science notebook. No matter what you call it, people use the field journal for the purpose of recording qualitative, quantitative, and sensory data in the field.

Throughout the curriculum, students have practiced using their field journals. In this lesson, students will learn the constructs of, and good habits for, field journals, taking what they've learned in the past about time, species, measurements, and location, and recording all that data in written form.

Field Journal Basics

Pre-Lesson Preparation: Create a large wall chart with columns in which students will record their sensory observations. In addition, prepare different scents in vials.

Teach students the importance of using a field journal correctly, and work on student's note-taking abilities. Elicit good practice habits by asking questions and instructing students to make comprehensive recordings while in the field. This is a building process and will require a lot of modeling and practice. State your expectations in the beginning so students can succeed in the field when you're not around. Follow these steps:

1. Engage students in the activity by asking
 - » Who has a diary?
 - » Why do you write in a diary?
 - » What can you learn about a person from his or her diary?
 - » Would you want to read your mother's diary from when she was a girl?
 - » What do you put in your diary?
2. Explain that scientists keep track of their observations through field journals, sometimes called scientific journals or nature journals, depending on the context. (For example, lab scientists usually refer to their notebooks as scientific notebooks; nature scientists often call them field journals.)
3. Explain how students can take their notes from previous lessons and compile them in their field journal. For example, ask students what information they've needed thus far to complete the NM data-collection form. Explain that they should record such information in their field journals first.

LESSON OBJECTIVES AND MATERIALS

OBJECTIVES

- » Learn how to take good field notes
- » Use senses for making observations
- » Practice identifying species in the field

MATERIALS

- » NM data-collection form
- » Field guides or animal fact sheets
- » Field journals (bound scientific notebooks)
- » Leaves, seashells, flowers, or other objects for demonstration
- » Honey, perfume, burnt grease, rose, cinnamon, and other items to smell
- » Small containers or jars
- » Pens and pencils

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Field Journal Basics (continued)

4. Show an example of a field journal and describe the components it should contain
 - » Table of contents (Leave the first three pages blank for this component.)
 - » Entry title and date
 - » Page number
 - » Purpose of experiment
 - » Procedure or event
 - » Scientific drawings
 - » Scientific data and observations
 - » Neatness and organization (e.g., the use of tables, charts, and graphs)
 - » Calculations and results
 - » Conclusion and resources
5. Practice some basic note-taking skills on the board. Emphasize the importance of accuracy and completeness.
6. Ask students to select an object from nature (e.g., a leaf, flower, seashell) from a tray and describe the object through words and drawings in their field journals. Encourage students to record the object's
 - » Measurements
 - » Specific colors
 - » Shape
 - » Texture and smell (and other sensory information)

Students can also record speculative information, such as how old they think the object is or what it's original habitat might be.

7. Present objects of the same color but different textures to help students enhance their descriptive abilities.
8. Encourage students to reference different materials, such as a thesaurus, the Internet, or field guides to expand their vocabulary.
9. Discuss student's findings, and record different pieces of information on a wall chart. (You might want to organize the chart by senses.)
10. Present to students at least three different scents in small, unmarked vials (e.g., honey, perfume, burnt grease, rose, cinnamon). Put each scent in more than one vial. Ask students to
 - » Find partners with vials of the same scent
 - » Work as a team to decide what the scent is and to discuss what it makes them think about
 - » Write all findings in their field journals

CUSTOMIZATION TIP

Is the lesson too advanced for your students? Here are some ways to customize the lesson for younger age groups:

- » **Grades K-1:** Bring in something to look at, such as an insect or plant. Ask students to explain and record what they see, and elicit questions about the senses.
- » **Grade 2:** Ask students to record what they see in the classroom in their field journals. Try to elicit questions related to the senses. Encourage students to use rulers and colored pencils for graphs and drawings.

KEY POINTS

Visit sciencenotebooks.org for examples of student journals, teaching tips, and classroom tools.