

## **Lesson/Activity- Journaling in Science**

\* This lesson is designed for one 1.5 hour block period or two 45 minutes periods.

### **Background Information**

The purpose of a scientific journal is to build observation and process skills in a manner similar to the way scientists work, while serving as a context for developing literacy. Journals can be used to record students' findings, questions, thoughts, drawings, data, observations and wonderings that may or may not retell the journey of their science experience.

Students find the keeping of a private journal (that is neither graded nor turned in) an unexpected delight – a sort of vacation – but one that can provide students with a kind of review more lively and rewarding than note-taking. Journals enable people to become better problem solvers.

### **Objective**

Students will:

- Set-up Science Journals for themselves, as well as goals for their journaling.
- Record observations, in the form of words and images, of rain-forest artifacts

### **Skills**

- Observation
- Idea expression
- Interpretation

### **Materials**

- Journals (hand-made or composition or spiral, etc)
- Photographs of rainforest images (printouts and/or a projector)
- Natural artifacts from forest (leaves, flowers, seedpods, bark)
- Pencils, colored pencils
- Scissors
- Tape
- Audiotape of rainforest sounds (available at libraries/natural history museums or online)

### **Procedure**

Prior Knowledge

1. Explain to students (during this lesson if using bought journals or possibly in a prior lesson if students make their own journals) how scientists use Field journals. Show students examples from famous scientists' journals (DaVinci, Darwin, Goodall, Fossey), as well as your own or other students' work if available. You can use the projector for this, collected artifacts or printed images.

*Ask: What are some ways you can record your observations and ideas?*  
*Answers: Prose, lists, descriptions, sketches, diagrams, brainstorm, quotes, cartoons, questions, artifacts, photographs—anything visual!*

2. If you have a personal anecdote about using a journal, tell a bit about your own process and benefits.

### **Exploration**

3. Tell students that they will practice recording some observations about the rainforest in their journals today. Their recordings will not be graded or collected, but you would like them to share their work later if they feel comfortable doing so.
4. Make sure every student has a journal and space to write. Make sure that the following materials are available to all: pencils, colored pencils, scissors and tape.
5. Tell students they will begin by writing about what they HEAR. Remind them that they can use any of the methods for recording that they discussed earlier. Play the tape for about 5 minutes, perhaps turn the lights down or allow students to close their eyes for a few minutes before writing. Allow 10-15 minutes for journaling.
6. Ask some students to share their entries. Students may write pure descriptions, others may have done interpretive sketches or asked questions. Any examples can be jumping off points to discuss the importance of recording observations for memory, for inspiration, for generating ideas/questions/inquiry.  
\*Break-point for 45 minute periods\*
7. Next, tell students that they will write about what they SEE. Provide each table with visual artifacts from the rainforest (photographs and/or natural objects). Tell students that they may tape a photograph into their book if they use it in their writing. Remind them of their journaling options and give them 15-20 minutes to journal.
8. Have students share their entries in small groups for 10-15 minutes (students who don't want to reveal their entries are not required to). Students should take note of the different ways their peers used their journals.

### **Wrap Up**

9. Ask students how journaling could be useful to them in science today and in the future?

*Answer: Journaling is a way of keeping track of your experiences. Sometimes it is a written ledger of ideas, artifacts or questions. In the future these could be used to generate investigable questions or background information or lessons or proof of process. It's also a way of flushing out ideas in your own head.*

10. (HW) Ask students to complete a journal entry responding to how they FEEL or THINK about the rainforest based on the sights and sounds they observed today.

## Resources



A typical Journal



Dian Fossey Journaling



Leonardo DaVinci's Journal



Jane Goodall, Journaling



Charles Darwin's Journal