



## **Nature Journaling**

**Summary:** The study of natural history encompasses the whole world, including the life contained in a backyard. It operates on all scales from the panoramic sweep of a mountain-top view to a patch of weedy grass next to a sidewalk; living things are present at all levels of habitat. To better experience their own patch of earth, students in grades 2 through 4 can learn to observe closely one small area and record what they observe through nature journaling in their own backyards. The student is directly involved in the observation because the illustrator literally recreates what he sees; the illustrator often expresses the feeling of having really "seen" the natural subject for the first time. Nature journaling refines future drawing and observational skills, creates a connection to a specific place over a discrete time, and fosters an appreciation of the outside world.

The lesson will combine outdoor observation, classroom discussions, and online activities. Students will observe and illustrate their own backyards, compare and contrast their backyard discoveries with classmates, and share their findings with others via the Backyard Jungle Web site.

**Level:** Grades 2-4

**Objectives:** The students will be able to:

- Identify a natural subject they find interesting to observe
- Record relevant observations about the subject, such as date, time, weather, cloud pattern, sounds, smells and location
- Choose the most appropriate among a variety of art materials to illustrate their subject
- Observe their subject over time (one sitting or multiple)
- Create a layout and presentation of ideas and observations in a nature journal
- Accurately render the subject through drawing, painting or coloring
- Write, discuss and share their thoughts on the subject

**Sources:**

- Walker-Leslie, Clare and Charles E. Roth, Nature Journaling, Storey Books, Pownal VT, 1998
- Walker-Leslie, Clare, Nature Drawing: A Tool for Learning, Prentice-Hall

**Estimated Completion Time:** 3 to 4 hours (minimum: 1 hour classroom discussion, 1 hour computer lab, 1 hour outside)

**Materials Needed:**

- Art supplies
- Drawing paper/nature journal/downloaded worksheet
- Ruler
- Thermometer
- Digital camera (optional)

**Procedure:**

1. Gather students and discuss how drawing a natural subject can increase their familiarity with the world around us - indeed, one we rarely take the time to really see.

**Visit our Website at [pbskids.org/backyardjungle](http://pbskids.org/backyardjungle).**



2. Pass out copies of the downloaded form available on the Backyard Jungle website, drawing paper and/or journals, digital cameras, and art supplies.
3. Lead students outside and instruct them to find an interesting natural subject or field of view to be considered as a subject. Ask them to choose a scale-of-view: either a large landscape or close-up study of one subject.
4. Allow students to seat themselves comfortably and take some time to simply observe the day and their subject of choice.
5. Record on the drawing paper, downloaded form or journal relevant information about the day: weather, time, temperature (using the thermometers), cloud patterns and types, ambient sounds and smells.
6. Ask students about each of their subjects: a leaf, a bug, a bird, a plant, or a landscape. What drawing materials would they like to use to capture the subject? Pass the relevant materials out to each student.
7. Have students draw/photograph the subject over 20 minutes and record any activity they see during that time. Students working on detailed, small-scaled subjects should measure their objects and record in proper units (inches, centimeters, etc.)
8. Students should spend 10 minutes or so refining their drawings using any additional art supplies.
9. Direct the students indoors. Facilitate discussions among students about their subjects. Divide students into small groups to compare/contrast their findings. Students may share their drawings and photographs. What made each subject interesting to them? Did anyone notice or learn anything new about their subject? How are the subjects drawn/photographed by other students similar or different? Ask students to explain and provide examples to support their observations.
10. Follow the small group discussions with a larger class discussion. What new things were noticed during their time outdoors? How did this exercise help them to feel more connected to the place they occupy? How did their subjects change over time (minutes, days, weeks, seasons)?
11. Direct the students to the computer lab and have them go to the Backyard Jungle Web site: [pbskids.org/backyardjungle](http://pbskids.org/backyardjungle). Have students create member Ids/passwords and share their findings online by creating new Discoveries and/or Backyards with other Backyard Jungle members. Visit [pbskids.org/backyardjungle/info/wheredoistart.php](http://pbskids.org/backyardjungle/info/wheredoistart.php) for more information.
12. Repeat the above sequence of events on a regular basis to see how their own Discoveries and Backyards (and those of other Backyard Jungle members) change and develop over time.

**Classroom Assessment:** Use the rubric below to evaluate student performance:

	<u>Novice</u>	<u>Proficient</u>	<u>Mastery</u>
Quality of Documentation	<ul style="list-style-type: none"><li>Produced a drawing or photo of the subject</li></ul>	<ul style="list-style-type: none"><li>Produced detailed art or photo with written description of the subject</li></ul>	<ul style="list-style-type: none"><li>Produced detailed art or photo with written description of the subject</li><li>Accurate use of ruler and thermometer</li></ul>
<u>Quality of Discussion</u>	<ul style="list-style-type: none"><li>Able to verbally describe subject</li></ul>	<ul style="list-style-type: none"><li>Compare/contrast what they saw with others</li></ul>	<ul style="list-style-type: none"><li>Based on classroom discussions, able to draw conclusions</li></ul>



			about the subject and larger Backyard
Online Collaboration	<ul style="list-style-type: none"><li>• Able to use Backyard Jungle drawing tool to share their subject online or able to upload photograph to share</li></ul>	<ul style="list-style-type: none"><li>• Able to correctly categorize and share their written and drawn/photographed subject when submitting Discovery</li></ul>	<ul style="list-style-type: none"><li>• View other online Discoveries and Backyards and provide feedback via the safe- messaging system.</li></ul>

**Extensions/Adaptations:**

1. To adapt the Nature Journaling lesson for older children, introduce the idea of keeping a Nature Journal over time. Nature Journals are simply blank books of unlined drawing paper suitable for drawing and recording a subject over time. Observe one area or subject weekly over a period of a few months to see how the habitat changes during this time.
2. Conduct the same lesson at night to observe nocturnal changes to the same habitat.

**Relevant National Science Education Standards:***Science as Inquiry: Demonstrates abilities necessary to do scientific inquiry*

- Ask a question about objects, organisms, and events in the environment
- Employ simple equipment and tools to gather data and extend the senses
- Use data to construct a reasonable explanation
- Communicate investigations and explanations

*Physical Science: Understands properties of objects and materials*

- Objects have many observable properties, including size, weight, shape, color, temperature, and the ability to react with other substances. Those properties can be measured using tools, such as rulers, balances, and thermometers

*Life Science: Understands the characteristics of organisms*

- Organisms have basic needs. For example, animals need air, water, and food; plants require air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met. The world has many different environments, and distinct environments support the life of different types of organisms.

*Life Science: Understands organisms and their environment*

- An organism's patterns of behavior are related to the nature of that organism's environment, including the kinds and numbers of other organisms present, the availability of food and resources, and the physical characteristics of the environment. When the environment changes, some plants and animals survive and reproduce, and others die or move to new locations

*Science in Personal and Social Perspectives: Understands changes in Environments*

- Some environmental changes occur slowly, and others occur rapidly. Students should understand the different consequences of changing environments in small increments



over long periods as compared with changing environments in large increments over short periods.