

# Nature Journaling

“If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in.” –Rachel Carson

## Background Information:

### Bin Information

The purpose of this activity is to help students build connections to nature, an inquiry-based mindset, and observational skills. Continuing this activity once a week will also foster an awareness and interest in phenology as student observations begin to include observations of changes over time.

This lesson is part of a series on phenology and observation and is preceded by “Migration Relay” and followed by “Out of Sync.”

## Materials and Set-Up:

This kit includes:

- 30 sets pre-cut cardboard for journal covers, approximately 5x7”
- Yarn
- Hole puncher
- Rulers
- Sample Nature Journal for reference

You will need:

- Paper to fill the nature journal.
- Writing Utensils
- Optional: cardstock sheets to glue found items on
- Optional: materials to decorate the nature journal covers

Set-Up:

- Gather and set up all of the materials needed for creating a nature journal. Determine if there are any steps that you wish to do in advance for your group (such as pre-punching holes)
- Choose a natural area where students will write their first journal entry. Walk the area to check for any environmental hazards.
- If there is not a suitable area, or for a foul weather alternative, collect several natural objects such as a variety of interesting leaves or rocks (at least one per student).

### Author:

Dominique Menard

Observation routine adapted from BEETLES lesson “I Notice, I Wonder, It Reminds Me Of”

### Themes:

Phenology, Nature Journaling, Observation

### Estimated Duration:

1 hour (longer if decorating journals)

### Audience Identified:

3-5 grade

Adaptable for older and younger

### Locations:

Spot to assemble journals

Natural spot to journal in

### Goal:

Students will use nature journaling as a tool to observe phenological changes and develop an inquiry mindset.

### Objectives:

Students will develop a working definitions and examples for the following:

- observations
- questions
- connections
- explanations

Students will create the first entry in a nature journal.

## Introduction:

Estimated Duration: 5 minutes

### Attention Getter:

Any established group or classroom attention-getters can be used to regain the attention of the students when giving directions or transitioning activities. If you choose to use an attention getter personalized to this lesson, have student's mimic different clap patterns. At the beginning of the lesson, when introducing this attention getter, let students know that it is because paying attention to the different patterns is a way to show their observation skills.

### Warm Up:

To warm up, have students share times when they noticed something in nature that stood out to them, and why it stood out. Did they have any questions about it? If students struggle to think of an example, give a few prompts. It does not need to be something from a wild setting; it could be a plant in a crack in the sidewalk or a squirrel going through trash.

In a small group, go around in a circle and share answers. In a larger group, have students share with a partner and call on a few to share with the class.

## Content and Methods:

### Making a Nature Journal

Estimated Duration: 20 minutes

- To make the nature journals, have each student take two pieces of cardboard for the front and back covers. Punch two holes in each piece of cardboard. Make sure that they line up with each other. If adapting to a younger age, you may wish to punch holes in advance.
- Determine which is the front and which is the back cover. If desired, this is a good point to personalize and decorate the covers. (Note that if you are planning on journaling the first entry in the same session, you will have to decorate later or abstain from using any materials that will need to dry, like paint or glue.)
- You can also add a storage envelope at this point. Take the back cover, and a piece of paper cut the same size. Construction paper also works well. Fold the edges on three sides an inch to center and glue to the back cover to make a small pouch.
- Determine how many pages each student will start with. It is possible to add more later. Hand out 8.5x11 sheets. Have students fold each sheet in half ('hamburger style') and add punches to line up with the punches on the covers. Optionally, prepare other types of pages as well at this point, such as cardstock for gluing or painting, lined or graphing paper, etc.
- Use the yarn to thread through the hole punches and tie a knot to secure the nature journals. Leave enough slack so that the pages are easy to turn.

### Observation Routine

Estimated Duration: 20 minutes

Lead students outside to a natural area with their nature journals. If there is no such area available, collect a bunch of interesting natural objects such as leaves or rocks.

Tell students that there are many ways to use a nature journal, and while no way is right or wrong, for the first entry you are all going to be working on making good observations together. Ask the students to share people who they know are good observers, whether it is in their personal life or a figure from history or the media. Ask what makes a good observer. Tell students that in this lesson you will be learning some tools to become better observers that can change the way that we interact with the world.

As a class, choose something that sparks interest to use as an example as you walk through the steps together. This could be along the lines of a tree, or having everyone find a similar object, like a twig. Gather so that everyone can see, hear, and share well.

### I Notice: Making Observations

The first step is making observations. Ask students to share ideas about what an observation is and guide the class to a working definition. An observation is something that can be noticed with the senses (“I notice the leaf smells.. I notice that the leaf feels...”). It is something that is being noticed in the moment, not recalling information that you already know (“I notice that the leaf has lobes that come to points” rather than “I notice it’s an oak leaf.”). Observations are not opinions (“I notice the leaf is pretty” is not an observation). Observations are not possible explanations (“I notice that bugs ate the leaf” is not an observation if you did not observe it). Remind students that just because a statement isn’t an observation doesn’t mean that it is bad or doesn’t have value-it just isn’t a part of this specific step. For this exercise, begin all observations by saying “I notice.”

When you feel confident that students have a firm grasp on what is and isn’t an observation, have them spend a minute making their own observations and sharing with a partner. After this is done, call on a few students to share with the whole group.

### I Wonder: Asking Questions

The next step is asking questions based off of the observations made. These questions do not need to be immediately answerable. It is a great time to start a small discussion on the purpose of questions; is it an answerable question that a scientist might use, or a question without an answer that is interesting to think about? Both have their place. For this exercise, begin all questions by saying “I wonder.”

Have students spend a minute asking questions and sharing with a partner. Questions might spark new observations which is great! As before, give a short amount of time for a few students to share with the group.

### It Reminds Me of: Making Connections

After asking questions, the next step is making connections. Using the prompt of “It reminds me of,” students should make various connections. The connections can be based off of the senses used in “I notice” such as “this smell reminds me of...” or “this looks similar to...” The connections can also be to an experience or memory, or a connection to information that they know. Give several examples of the broad range of connections.

Have students spend a minute making connections and sharing with a partner, and then calling on a few examples to share with the group.

### I Think Maybe: Making Explanations

This step can be introduced now or brought up later when reflecting if attention runs low.

The “I think maybe...” portion is a great tie to science and the scientific method. Some of the questions posed early will tie in better than others. What are some questions that you have ideas about answering? Come up with some “I think maybe...” statements to form hypothesis to answer the questions, and then discuss ways that they could attempt to answer those questions.

Have students spend a minute thinking of possible explanations to their ‘I wonder’ statements and sharing with a partner.

## Conclusion:

Estimated Duration: 10 minutes

Spread out in the area, or have students each select one of the nature items. Use the journals to record the first entry. Students can find something that interests them to make their first journal entry based on the “I notice, I wonder, this reminds me of” format that the class has gone through. If they have extra time, they can add anything else that stands out to them in their journals.

## Reflection and Evaluation:

Estimated Duration: 5 minutes

### Reflection

Circle up after finishing journaling and students to share responses to the following prompts:

- What did you like about journaling and what would you change for next time?
- Is there anything that you are very interested in that you are hoping to journal about in the future?
- If you go back to the same spot next week, what do you think will change, and what will be the same?
- What are other ways you could use your nature journal to record what you notice or connect with nature (adding drawings, pressing leaves, recording weather, writing poems, etc.)

### Evaluation

Formal evaluation can take place by collecting the journals and checking off that the first entry has examples of an observation, a question, a connection, and a possible explanation.

Informal evaluations can take place throughout the lesson. Students who are successful will be engaged and showing understanding when discussing observation as a group, who observe and journal for the full allotted time, and who share and show understanding during the reflection.

## Extensions:

### Further Entries

While this lesson only covers the first journal entry, the activity is designed to be an introduction to continued nature journaling. Further entries can follow the same format of “I notice, I wonder,” follow other formats, or be less structured. Journaling can take place during class time or independently. Continued journaling will continue to build an inquiry mindset and heightened observation. Journaling for an extended timeframe will also help to develop an understanding of phenology by noticing the changes over time.

## Accessibility and Adaptations

**Distance Learning:** A shortened Seesaw version of this lesson can be found at:

[https://app.seesaw.me/pages/shared\\_activity?share\\_token=JKvgOQh6Q\\_63k\\_Y9bOe20g&prompt\\_id=prompt.822885b0-d5fa-490c-9be7-af10e06f2f3b](https://app.seesaw.me/pages/shared_activity?share_token=JKvgOQh6Q_63k_Y9bOe20g&prompt_id=prompt.822885b0-d5fa-490c-9be7-af10e06f2f3b)

**Social Emotional Learning:** The prompts that are used for the journaling can also be used for students to check in with their own moods and feelings as well as the moods and feelings of others. After completing the journaling activity, have students pick spots where they can focus on themselves without being distracted by others and use the same prompts as before, but instead of only focusing on nature, they should also focus on their own feelings, the feelings of others, and how the people in the group interact. What do you notice, what do you wonder, and what does it remind you of?

**Reading and Writing:** The nature journals exist first and foremost as a personal log and tool for observation and connection. While writing in them can help to develop English language skills, it should not be a hindrance. Remind students that the journals are for them, and if writing in a first language or using drawings as a record helps, they should do so for this activity.

## BEETLES (Better Environmental Education, Teaching, Learning & Expertise Sharing)

The exploration routine described for the first nature journal entry has been adapted from a BEETLES activity of the same name. BEETLES is an organization of environmental educators who research, create, and test across diverse settings high quality outdoor science lessons. It operates through the Lawrence Hall of Science through the University of California Berkeley.

Other BEETLES exploration routines can also be used as a basis for future journal entries, including

- Interview and Organism
- NSI: Nature Scene Investigators
- Discovery Swap
- Hand Lens Introduction

All of the above, as well as the original lesson for “I Notice, I Wonder, It Reminds Me Of”, can be found on the BEETLES website along with other resources at <http://beetlesproject.org/resources/for-field-instructors/>

## STEM

Before creating the nature journals, pass around the sample contained in the bin as a ‘prototype.’ Have students spend time using the Engineering Design Process (Ask, Imagine, Plan, Create, Improve) to identify potential problems with the nature journals and plan ways to improve them before creating their own. For example, how could the inside pouch be improved to hold things better? Could there be a way to make the journal water resistant?

## Further reading

For older students who are interested in using what they notice in nature in practical ways navigationally, or to learn more about the history of a place, check out the book “The Lost Art of Reading Nature’s Signs” by Tristan Gooley.

To get an idea of things to be keeping an eye out for at certain times, try Larry Weber's "Backyard Almanac."

## Reference Materials:

BEETLES. For Field Instructors. The Lawrence Hall of Science. Retrieved from <http://beetlesproject.org/resources/for-field-instructors/>

Gooley, T. (2015). *The lost art of reading nature's signs: Use outdoor clues to find your way, predict the weather, locate water, track animals--and other forgotten skills*. New York: Experiment.

Weber, L. (2014). *Backyard almanac: 365 days of northern natural history*. Wrenshall, MN: Stone Ridge Press.

