

# Journal Challenge

## Prompt #2: Meet a Tree, Zoom In/Zoom Out



**Duration:** Approx. 30-45 mins

**Grade Level:** Any age, 4 and up! (Younger ages will need an adult helper)

**Location:** An outdoor area where you can find a tree or plant (or natural object) of any kind!

**Materials:** Paper and pencil (Optional: colored pencils or other coloring tools, magnifying glass or hand lens)

**Background:** This prompt is the second in a series of Journal Challenges which will include focused observation and thinking, and using a variety of techniques to record data.

**Summary & Goals:** Applying a new perspective to any situation is a great skill to acquire. In nature journaling, new perspectives can help you see relationships and patterns that you may have missed otherwise. Intentionally focusing on different levels of magnification will give you a broader awareness of a given subject -- in this case, a neighborhood tree, plant, or other natural object!

This zoom in/zoom out activity will help you practice your observation skills and allow you more familiarity with surrounding trees/plants in space around you! The tree or plant you choose can be small and leafy or great and tall.

The goal is to make a detailed observation of your chosen tree or plant using drawing and writing at two different scales: 1) at life size; a zoomed-out perspective of a tree in its environment, and 2) a focused view of the plant; zoomed-in (e.g. bark, a leaf, or a root).



Photo Credit: "How to teach nature journaling", by Laws & Lygren

**Procedure Summary:** Use your nature journal to record observations of a tree or plant in your neighborhood, starting by looking at it from a distance. Record any observations that stand out to you about this tree. Next, zoom in, focusing on just a small part, such as a leaf or bud. Use a circle to indicate the zoomed in perspective (see example above). Reflect on your experience through discussing or writing answers to the guiding questions.

### **Activity STEP BY STEP:**

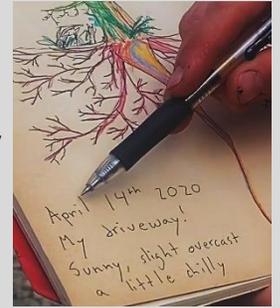
1. Grab a piece of paper, something to write with, and a hard surface (like a big book or clipboard) to draw upon.
2. Designate or mark two to three sections on your paper for focused areas of sketching and notes including: 1) a space for a life-sized drawing, 2) a small area for a zoomed-in drawing, and, optionally, and 3) Optional: a section for a zoomed-out perspective of the tree/plant in its' environment. (You can use multiple pages if you need!)



A field trip student at Oxbow uses an orchard tree as a subject for their nature journal.

- Go outside and walk around your yard, neighborhood or a nearby park. Choose a tree, plant, or other natural object that interests you!
- Walk around the tree or plant, observing its size, shape, and/or types of leaves. Think about the different textures and shapes that are a part of it.
- Life size scale:** In the center of the page draw a picture of the tree from how you see it where you are standing, only draw the parts of the tree you can see. Make any observations and take notes recording what you notice about the tree at this scale: *What does the bark look like? Do you see wildlife in the tree? What is the soil like around the base? Are there other features around the tree you'd like to include in your drawing?* Include the **metadata!**
- Zoomed-in scale:** Draw a circle on the side of the page where you will zoom in to one part of the tree. You can choose a branch with a bud on it, the bark, the leaves, or whatever sparks your interest. Within the circle draw what you see up close, if you have a magnifying glass, use it for extra detail. Make a note about what you observe when you are this close that you didn't see before: *Is it rough? Is it smooth? Are there new colors?* Follow the **ABCDE's** of scientific journaling!

**Metadata** is like a record. It gives context that makes the entry scientifically useful. You can get creative or just add a list that includes: Date, Weather, & Location!



### Optional Challenge: Zoom out even further!

**Zoomed-out scale:** Now take a few steps back, try to look at the whole tree. On the other side of the page draw a small map of tree in its environment. Notice how it interacts with other objects around it. *Is it shading your house? Is it breaking the sidewalk with its roots? Is it living in a family of trees? Is the top the tallest thing around in your line of sight?*



As an extra challenge, add a further zoomed out perspective, like this entry in the lower left corner of this journal entry!

### Guiding Questions:

- What parts of the tree did you notice at each scale? What made these parts similar or different? What do you think you would see if you could zoom in even more?
- What outside influences may have had an effect on this tree's patterns, colors, or shape?

Follow the **ABCDE's** of scientific sketching!

- A:** Accurate
- B:** Big
- C:** Colorful (or referencing color)
- D:** Detailed
- E:** Explained

### \*A note for adults or teachers:

Give constructive feedback!  
 "Rather than praising a drawing as "pretty," you can say, "Great job making your sketch **big**; it really helps me see the details," or "I'm glad you included **explanations** in your sketch; they will help another scientist understand what's important." For constructive feedback, try: "What could you do to make this sketch more **accurate**?" or "I bet adding **color** would help another scientist understand what the object really looks like."

Source:

<https://www.calacademy.org/educators/lesson-plans/introduction-to-scientific-sketching>

- Tap into your senses: what do you see, smell, and hear in this tree's environment?

**Conclusion:** Once you have finished your observation and journal entry, reflect on any questions that came up during the activity. Did anything surprise you? Did any other questions come up as you explored your tree from each perspective?

Check up on this tree regularly to see how it changes through the season! You can even repeat this activity to create a record! Do a bark rubbing or press a leaf!

If you're curious to identify the tree or plant species, use a book or online guide like [this one from Alderleaf Wilderness College](#) or a guidebook like "Plants of the Pacific Northwest Coast", by Andy MacKinnon and Jim Pojar.

### **Resources:**

The Beetles Project: Journaling with Students - <http://beetlesproject.org/cms/wp-content/uploads/2015/12/Field-Journaling-With-Students.pdf>

California Academy of Sciences: Introduction to Scientific Sketching - <https://www.calacademy.org/educators/lesson-plans/introduction-to-scientific-sketching>

Book: *How to teach nature journaling: Curiosity, Wonder, Attention.* John Muir Laws and Emilie Lygren. Heyday; 1 edition. 2020.