

Nature Journal Lessons

1. Fall Leaf Study
2. Oak Tree Study
3. Bird Study & Painting

Lesson #1 - Fall Leaf Study

Description: To study the science behind the changing colors in fall, including notes and a drawing. Students will gain an appreciation for the beauty in change and the chemical makeup of autumn colors found in different leaf types.

Standards:

5th VA.1.CR1.5 - Use formal and conceptual vocabularies of art and design to describe a work of art (e.g. elements & principles of design).

4th LS1.1 - Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

Preparation:

(1 day before)

Ask kids to collect fall leaves the day before. Ask them to collect colorful leaves. Problem solve where and when they can remember to collect and how to store them to bring to school.

(Right before lesson)

Display the leaves that children brought in - they will be shared to allow at least one for everyone to study.

Motivator: 10 minutes

1. Read aloud Fletcher and the Falling Leaves by Julia Rawlingson.
2. What do they think the reason for the change of color of the leaves is?

Procedure: 30 minutes

1. In their nature journals, have them answer this question: *"Why do you think leaves change from green to red/orange/yellow in the fall?" This should be their own ideas.*
2. Watch this video and have them take notes in their nature journal:
<https://www.youtube.com/watch?v=rwA1QVsbD6g> (Watch a few times, stopping to talk about vocabulary and discussing the concepts introduced).
3. Invite students to go choose a leaf from the shared space that you placed them. They take it back to their desk.
4. Lead the class in completing a blind contour drawing of the leaf. They are to not look at the paper - just at their leaf that they are drawing. They should draw the outer contour. It takes about 2 minutes.

5. Have them look and share their drawings. This exercise teaches them to look at their subject very carefully - noticing all the details.
6. Now, have them draw their leaf in their nature journal slowly and carefully, paying attention to all the tiny details.
7. They are then going to try to replicate the color of the fall leaf using chalk pastels.

Wrap Up

1. Have the kids put their creations out for display on their desk so everyone can walk around and admire/critique student notes and drawings.
2. When kids are back at their seat, have them orally give compliments to the class about the work they saw.

Extension Activity: Make a Fall Leaf Mobile (30 minutes after 30 minutes of prep)

1. Preserve the leaves using a press.
2. After a few days, remove the leaves and tie string or fishing wire to each leaf.
3. Choose several and create a hanging mobile using a cross stitch wooden hoop.
4. The mobile can be hung over table groups in your classroom!

Lesson #2: Oak Tree Study

Description: To understand the importance of the oak tree to the habitat in which it is found. Also, to analyze the difference of the tree in the summer versus the winter.

Standards:

4th VA.1.CR1.4 Imagine and articulate numerous approaches for composition.

Preparation:

Collect oak leaves in your neighborhood or on another adventure! At least 10 - or one for every student.

Motivator: 10 minutes

1. Start the lesson by distributing several oak leaves you have previously collected.
2. Ask how the kids could figure out what tree species it belongs to.
3. Distribute tree identification books or prepared handouts if you do not have enough books for kids to share. (Remind students to use their past knowledge and classroom posters to look at the number of lobes, edge shape, and arrangement of leaves on stem.)

Procedure: 30 minutes

1. Show this video:
 - [Acorn to Oak filmed over an 8 month period time-lapse](#)

2. Start by drawing the life cycle of the Oak. In a circular format, model how to leave space for 6 drawings. Walk them through each drawing - asking them to name that stage of the trees life. Click on this [suggested image](#) to help. It is taken from the book: Drawing Trees and Leaves: Observing and Sketching the Natural World (The Curious Artist)
3. Next, show the following few videos and have the kids take notes in their nature journal.
 - [Using Live Oak Trees as a Blueprint for Surviving Hurricanes | Think Like a Tree](#)
 - [Facts About Oak](#)
4. Have a discussion about the most interesting things learned from the videos. Have the kids share out. Ask, Why is the oak tree important in its environment? Give the kids several minutes to note take in their journal based on the discussion. Then, have kids spend a few minutes working with a partner, sharing their notes and helping each other.
5. Go through these two drawing tutorials and have the kids follow along. Play each video several times.
 - [How to Draw a Tree Step by Step for Beginners In 8 Minutes](#)
 - [How To Draw a Tree - easy, quick and simple](#)

Wrap Up

1. Compare the Oak tree to another tree that the kids are familiar with, for instance a Red Cedar Tree. Make a Venn Diagram to analyze the similarities and differences.

Lesson #3: Bird Silhouette Painting

Description: To create a painting with an informational card that informs the viewer about a local bird and the birds role in their ecosystem.

Standards:

3rd LS4.1 -Make observations of plants and animals to compare the diversity of life in different habitats.

5th VA.1.CR1.5 -Constructively design and manipulate materials, organizational and compositional elements to make meaning in a work of art.

Motivator

1. Ask students to name several birds that they know are local to the area. Write them down on the whiteboard in a chart as well as where they have seen the bird before.

Bird Name	Seen Where?	Habitat	Bird call (Onomatopoeia)	Importance to Ecosystem

Procedure

1. Choose one of the birds to model researching. Show the students allaboutbirds.org and how to look through the different menus to learn more about the bird. They should record all of their information in their nature journal.
2. Explain that they will be creating a painting and also an informational card to teach about their bird. It will be important that they know all about the birds habitat because that is going to be the background of the painting.
3. Review onomatopoeia. Practice creating one based on the sound of the bird call. Record under the bird you are modeling researching.
4. As they learn about the habitat and listen to the bird call, tell them to record those two things on the whiteboard.
5. Brainstorm other things that would be helpful to put on their information card. (diet, migration, size, etc.) If no one mentions it, be sure they write at least one sentence about the birds role in their ecosystem. Add this column to the whiteboard chart. For example, the pileated woodpecker creates holes in snags that provide habitat for secondary cavity users such as the common mergansers.
6. Send them off to do their research on tablets or computers.
7. Once their notes are done, have them research the habitat in google images. They should choose one that would be easy enough to paint with watercolors. It helps to search for the habitat name followed by the word watercolor (ex. Nw forest watercolor)
8. Review mixing natural colors using complimentary colors.
9. Introduce the word Contour for today's vocabulary word. Model how to use the silhouette drawing on allaboutbirds.org to draw your miniature one to be added to your painting later.
10. They should then be ready to get a watercolor paper and a small piece of cardstock to draw and then sharpie in their bird silhouette.
11. Provide an additional cut piece of cardstock for the students to create their final draft information card in sharpie. They can do this while their watercolor dries. Most likely, you will have to glue all together the following day or later in the day.

Wrap Up

1. As the session ends, direct students attention back to the front board and review their findings.
2. Have students read aloud the information they provided and to mimic the bird call.

Reflection

This lesson was fun and engaging for the kids! At first, I was thinking I would need to guide them on their bird selections, but the group pleasantly surprised me. After the initial bird

species brainstorm we had a list of 12 local birds. After the research session, several kids wanted to change their bird as they came across new species that were local that they preferred. On average, 2 kids studied the same bird.

The most difficult part of the lesson was definitely the watercolor painting. This is not a surprise though as I always feel like watercolor is difficult for kids to feel comfortable with and also to achieve a certain color/layout when trying to mimic an image. Their colors were not deep enough and the paper was not of a very good quality to receive the amount of water that they were applying.

On a positive note, the kids did an excellent job with the research. They were able to find the information they were looking for and then some. It was difficult for some of them to summarize the habitat information and also to be able to figure out the role in the birds environment. This information takes some extra thinking and is not clearly outlined in a subheader like diet or habitat. I like the extra thinking that it asked the children to do, but it definitely was their least favorite part because it was the hardest.