

GROW YOUR PALS PROGRAM GUIDE



THE NATIONAL FFA MENTORING PROGRAM

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LESSON 1.10

The Art of Leaves

Unit:
PLANTS AND GARDENING

PRECEPTS

- C. Vision
 - C2. Conceptualize ideas



Lesson Type:
Small Group

NATIONAL STANDARDS

- CS.01.01.01.a. Work productively with a group or independently.
- NRS.01.02.01.b. Identify trees and other woody plants.
- NL-ENG.K-12.12 – Applying Language Skills
- NS.K-4.3 Life Science

STUDENT LEARNING OBJECTIVES

As a result of this lesson, the student will ...

- Identify the difference between a deciduous and coniferous tree.
- Identify three types of deciduous leaves found in local areas.
- Create a leaf page representing three types of deciduous leaves.





TIME

Instruction time for this lesson: **45 minutes**.



RESOURCES

An area with a variety of deciduous trees, such as a city park. If such an area is not easily accessible, search leaf clip art at bing.com or Google.com to find free, downloadable pictures of deciduous leaves.

National FFA Organization. (2003). LifeKnowledge Precepts and Signs of Success.



TOOLS, EQUIPMENT AND SUPPLIES

- ✓ **Picture of a *coniferous* tree and a *deciduous* tree**
- ✓ **Three to five leaves per student gathered from trees in your area** (*select leaves that are flexible, not dry*)
- ✓ **Containers to separate each variety of leaf** (*small boxes, aluminum pie pans, etc.*)
- ✓ **Small branches 5 to 6 inches long from a pine tree with long needles** (*Ex: white pine, ponderosa pine*) – one per student
- ✓ **One pine cone or picture of pine cone** (*used when explaining difference between *deciduous* and *coniferous**)
- ✓ **Tempera or watercolor paints of various colors**
- ✓ **Paint brush** – minimum of one per student
- ✓ **Old newspapers, enough for one sheet of newspaper print per student**
- ✓ **Light colored construction paper** (*white, tan, yellow*)
- ✓ **Glue or glue sticks**
- ✓ **Child safety scissors** – one pair per student
- ✓ **Paper towels and water for clean up**
- ✓ **Masking tape or clear tape**
- ✓ **Writing surface and markers**
- ✓ **PALS1.10.SG.AS.A** – one for instructor



KEY TERMS

The following terms are presented in this lesson and appear in ***bold italics***:

Deciduous
Coniferous



CONTENT OUTLINE

Objective 1. | Identify the visual differences between a picture of a *deciduous* tree and a picture of a *coniferous* tree.

- A. Determine which classification of trees change leaf color and lose leaves in the fall and which retain leaves and color

Objective 2. | Collect three to six varieties of *deciduous* leaves found locally.

- A. Help students identify and name tree varieties from which leaves were collected

Objective 3. | Create a leaf print page.

- A. Use *deciduous* leaves to create painted prints of leaves on construction paper
- B. Create border around leaf prints with pine needles

INTEREST APPROACH

NOTE: This interest approach requires that you first make a leaf page similar to the one students will be creating in this lesson. It is suggested that you create this page at least one day in advance of the class so the sample leaf page is completely dry for use during instruction.



Did you know you can use trees to paint a picture? You can! This picture was painted using several different trees. Look closely and you can find clues that tell you how many different trees were used.

Hold picture up of leaf page so all students can see.



Raise your hand if you can see the clues.

Pause momentarily for students to raise their hands. If no one raises their hands, you may need to give a hint to lead students toward leaves, such as – These clues drop from trees in the fall.



Wave your raised hand to share the clues with us.

Pause, select a student waving his or her hand.



That's right! Leaves. How many different types of leaves are there? Correct! It took four trees to paint this picture.

Would you like to paint a picture like this? Great! Let's get started.

SUMMARY OF CONTENT AND TEACHING STRATEGIES

OBJECTIVE 1. | Identify the difference between a *deciduous* and *coniferous* trees.



Determine which classification of trees change leaf color and lose leaves in the fall and which retains leaves and color.

*Hold up the picture of a **deciduous** tree and a **coniferous** tree (examples: Silver Maple and White Pine). Ask students to identify what is different about the two trees. Answers may range from color, one has needles and one has leaves, the tree or leaf shapes. Ask students which one keeps its color all year long and which one changes color and loses leaves. Explain the one that keeps its leaves and color all year is called a **coniferous** tree. The one which changes colors and loses its leaves is **deciduous**. Use a Choral Response Moment to have students repeat the word **deciduous** and **coniferous**.*



Before we paint a picture with trees, we are going to learn about the types of trees we are using. Can everyone see these two pictures clearly? Take a few moments and study each picture closely.

Allow about 30 seconds for students to look at pictures.



Raise your hand when you notice something different between these two trees.

Allow students to share what is different about each tree.



Very good! One tree has wide leaves and the other has skinny leaves. One is dark green and one is yellow.

There is one more difference. One keeps its leaves all year long and one loses them in the fall. Can you guess which one loses its leaves? Shout it out if you know! That's right! The one on the left loses its leaves. It is a **deciduous** tree. On the count of three, let's say **deciduous** together. One, two, three –

DECIDUOUS!

*Sound out the syllables as you say **deciduous**.*



The tree on the right stays green all year long, does not lose its leaves and produces a seed called a pine cone.

Show picture or actual pine cone if available.



These types of trees are known as **coniferous**. The first part of the word sounds like cone, like the pine cone. That is why these trees are called **coniferous**. On the count of three, let's say **coniferous** together. One, two, three –

CONIFEROUS!

*Sound out the syllables as you say **coniferous**.*

*To check for student understanding of the difference between the two tree classifications, use the following activity. Instruct all students to stand up. Inform them you are going to say the names of the two types of trees. When they hear the name of the trees that lose leaves in the fall (**deciduous**), they are to sit down. However, if they hear the name of the trees that retain leaves in the fall (**coniferous**) they are to remain standing.*



Everyone stand up.

Pause until all students are standing



I am going to say the names of the two types of trees we just learned. When you hear the type of the trees that lose leaves in the fall, sit down. However, if you hear the type of trees that keep their needles all year long, remain standing. So when are you going to sit down?

Wait for students to respond with “When we hear the type of trees that lose their leaves.” If no one responds, repeat the directions.



Give me a great big smile if you are ready! Great. Here is the first word, **coniferous**.

*All students should remain standing. If some sit down, gently encourage them by saying, “Remember, you only sit down if I say the name of a tree that loses its leaves; are you sure a **coniferous** tree loses its leaves? Allow students to stand again.*



The second word is **deciduous**. Great! All of you are sitting down. That's right, a **deciduous** loses its leaves and a **coniferous** keeps its leaves all year long.

Next, we will use both **deciduous** and **coniferous** trees to paint our picture.



OBJECTIVE 2. | Identify three types of *deciduous* leaves found in a local area.



- Collect three to six varieties of ***deciduous*** leaves found locally.
Help students identify and name tree varieties from which leaves were collected.

*Collect three to six varieties of ***deciduous*** leaves found locally. You will need to do this in advance of the lesson. If schedule permits, you could take students on a walking field trip to collect leaves in advance of this lesson. Students will need three different ***deciduous*** leaves (example: oak, birch, maple). Select leaves that are not dry and brittle. Leaves should not break when handled. Separate leaves into containers by type of leaf. Work with students to identify leaves emphasizing they are all types of ***deciduous*** trees.*



- Quietly gather around the table in front of the room.

Wait for students to gather around the table.



- Notice there are five containers with different leaves in each container.

Depending on leaf availability you may have three to six containers with different leaves.



- Notice the different shapes and colors. Each leaf comes from a type of ***deciduous*** tree. Let's learn the names of each tree the leaves come from.

Hold up each leaf and describe its features – color, pointed, round, slender, oval, etc. Then tell students the variety of tree it came from. To enhance this, write the name of the tree on a writing surface and tape the corresponding leaf beside it for a visual reference.



- The leaf in our first box is a birch leaf. It is starting to turn from green to yellow because it is fall. It has pointy edges and many veins. When you hear “WHAT’S THE NAME” turn to the person next to you and say, “That’s a birch tree.” Ready?



WHAT’S THE NAME?

Continue on until all leaves available have been identified.

OBJECTIVE 3. | Create a leaf page representing three types of *deciduous* leaves.



Create a leaf print page. Use ***deciduous*** leaves to create painted prints of leaves on construction paper. Create border around leaf prints with pine needles.

*Use a Picasso Moment to help students learn three types of leaves. Each student will need the following items for this activity: three different ***deciduous*** leaves, one small branch with pine needles, three colors of paint, one sheet of newspaper and one sheet of construction paper, paint brush, glue or glue stick.*

Students will place a very thin coat of paint on one side of leaf (vein side up) and then press it onto paper, imprinting the paper with the leaf design. Students will repeat this with two other leaves on the same paper. When students have completed three leaf images on the construction paper, they are to make a border around the leaf page by gluing pine needles to the edges of the construction paper. See PALS1.10.SG.AS.A for diagram and instructions.



At the beginning of class, we said we would paint a picture using trees so let's get started. First, we need a piece of newspaper and a piece of construction paper. When you hear PAPERS, get one piece of newspaper and one piece of construction paper from the supply table. Once you have those supplies, return to your work station, spread your newspaper and place the construction paper on top of it. What are you going to get? That's right, one newspaper and construction paper.

PAPERS

You are now ready for leaves. When you hear the word LEAF, go to the supply table and choose leaves from three different trees to take back to your desk (*or table depending on the situation*). How many different leaves do we choose? That's right, three.

LEAF

Wait for all students to return to their desk. Observe to see if each student has three types of leaves.



Next, place each leaf on the newspaper, vein side up. This is the rough side of the leaves. Use your fingers to feel the veins.

Observe each student to be sure they have the vein side up.



Now your leaves are ready to paint. When you hear PAINT, come to the supply table and select a brush and the first color of paint you want to use. Return to your workstation and wait for instructions. What color of paint are you going to get? Correct, any color you want!

PAINT

Once students have paint and brush, demonstrate how to paint the leaf surface and press it onto the construction paper.



Before you begin to paint your leaf, let's learn how to paint the leaf and place it on our construction paper. First paint the leaf surface with a thin coat of paint. Use a thin layer or it will smear. After the leaf is painted, pick it up from the newspaper and lay the painted side down on the construction paper. Gently press the leaf onto the construction paper. Now remove the leaf and set it off to one side of your newspaper. We now have a paint print of the leaf. Repeat this with each leaf so you have three leaf prints when finished.

How do we paint our leaves—with a thick coat or thin? Thin. That's right! Paint your first leaf!

Check to see that students have leaves vein side up and are covering the leaf surface with a thin layer of paint. Some students may need assistance in picking up the leaf and pressing the image on the construction paper.

Once students have three leaf prints, they are ready to make the pine needle border. Demonstrate gluing pine needles on to leaf page. Refer to PALS1.10.SG.AS.A for instructions.



We have one last item to add to our leaf page. It is a pine needle border. Select a small pine branch and pull the needles off the branch. Next, take the glue stick and place glue on each end of the pine needle. Glue the needle next to the edges of your leaf page. You may use one needle per side of your leaf page or several. It is your choice. Once the border is finished, write your name on the leaf page and it is finished. What questions do you have?



You may now pick up a pine branch and glue stick to make your border. Begin.

After students are finished with borders, they will need to clean up. Instruct them to roll up their painted leaves inside the newspaper and throw away. Instruct them to bring their paint and brushes to the supply table.

Review the types of leaves and classifications of trees.



REVIEW / SUMMARY



All of you did a wonderful job on your leaf pages. Let's review what we have learned.

Arrange students in pairs. Ask questions and have them discuss the question as partners and then raise their hands when they know the answer.

1. Look at the leaves inside the border of your leaf page. What type of tree did they come from, a **coniferous** or a **deciduous**? Answer: **Deciduous**
2. What type of tree makes the border of your leaf page? Answer: **Coniferous**
3. What type of tree has leaves that turn colors in the fall and then drop from the trees? Answer: **Deciduous**
4. Each pair must answer this next question: Name three varieties of tree names we learned today. Answers will vary based on leaves selected.



APPLICATION

One-on-One Idea

Leaf Rub: Place a thin paper over the top of a leaf, with the vein side up. Rub with a crayon. The ridges of the leaf will appear and create a leaf outline.

Leaf Collage or Note Cards: Collect leaves and place between newspapers. Press between heavy objects such as large books or bricks for several weeks. When leaves are dried and pressed, remove them from papers and make a collage out of the leaves or glue them to note cards and write name and identification characteristics next to them.



Large Group Idea

Instruct students to look for trees they learned with this lesson on the way home from school, in their yard or in a park. When the group meets again, students can explain where they saw at least two different trees.



PALS1.10.SG.ASSESS.A | EVALUATION ANSWER KEY

For the evaluation, have students write the name of the tree leaf beside each leaf print on their leaf page.

PALS1.10.SG.AS.A

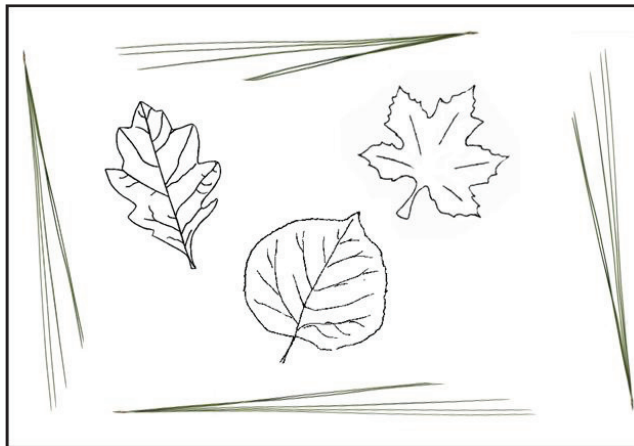
Creating a Leaf Page

Materials Needed:

- Three leaves gathered from trees in your area (select leaves that are flexible, not dry)
- Small branches, 5 inches long from a pine tree with long needles (Ex: white pine, ponderosa pine).
- Three colors of your choice of tempera or watercolor paint.
- Paint brush
- One sheet of newspaper
- One sheet of light colored construction paper (white, tan, yellow)
- Glue or glue stick
- Scissors
- Paper towels and water for clean up

Create Leaf Print on Construction Paper (See diagram below)

1. Lay out newspaper sheet on table.
2. Place leaf on newspaper vein side up.
3. Apply a very thin coat of paint to leaf surface. Do not use thick layer of paint or paint image in next steps will easily smear.
4. Pick up painted leaf and place on construction paper, painted side down.
5. Gently press leaf onto construction paper to make leaf image.
6. Repeat with next two leaves.



7. Use pine needles to make borders. Strip needles from pine branches and place small amount of glue in several places on needles. Glue needles to edges of leaf page as shown above.
8. Write name on page.
9. Place leaf page in area and allow paint to dry.