

# Meet a Plant



**Grade:** 1

**Length:** 30 minutes

**Big Ideas:** Investigation

**Topic:** Observation

**Summary:** Students will explore local plants. In partners, one student will lead a blindfolded student to a plant, where the blindfolded student will meet the plant and make as many observations about it as they can. Based on these observations, the blindfolded student will then try to find the plant they met, this time also using their sight. Afterwards, students will draw their plant, including all of their observations.

## **Standards:**

K-2 Standard 1 – Intended Learning Outcomes

The Processes of Science, Communication of Science, and the Nature of Science – *Students will be able to apply scientific processes, communicate scientific ideas effectively, and understand the nature of science.*

Objective 1: Generating Evidence: Using the process of scientific investigation (i.e. framing questions, designing investigations, conducting investigations, collecting data, drawing conclusions)

- 1. Framing questions: Observe using senses, create a hypothesis, and focus a question that can lead to an investigation*
- 2. Designing investigations: Consider reasons that support ideas, identify ways to gather information that could test ideas, design fair tests, share designs with peers for input and refinement.*
- 3. Conducting investigations: Observe, manipulate, measure, describe.*
- 4. Collecting data: Deciding what data to collect and how to organize, record and manipulate the data.*
- 5. Drawing Conclusions: Analyzing data, making conclusions connected to the data or the evidence gathered, identifying limitations or conclusions, identifying future questions to investigate.*

Objective 2: Communicating Science: Communicate effectively using science language and reasoning.

- 1. Developing social interaction skills with peers*
- 2. Sharing ideas with peers*
- 3. Connecting ideas with reason (evidence).*
- 4. Using multiple methods of communicating reasons/evidence (verbal, charts, graphs)*

Objective 3: Knowing the Science: Understanding the nature of science.

- 1. Ideas are supported by reasons*
- 2. There are limits to ideas in science (i.e. what can be observed, measured, and verified).*

3. Differences in conclusions are best settled through additional observations and investigations.
4. Communication of ideas in science is important for helping to check the reasons for ideas.

#### K-2 Standard 3 – Physical Science

*Students will gain an understanding of Physical Science through the study of the forces of motion and the properties of materials.*

##### Objective 2: Analyze objects and record their properties.

1. Sort, classify, and chart objects by observable properties, e.g. size, shape, color, and texture.

#### K-2 Standard 4 – Life Science

*Students will gain an understanding of Life Science through the study of changes in organisms over time and the nature of living things.*

##### Objective 1: Communicate observations about the similarities and differences between offspring and between populations.

1. Communicate observations about plants and animals, including humans and how they resemble their parents.
2. Analyze the individual similarities and differences within and across larger groups.

##### Objective 2: Living things change and depend upon their environment to satisfy their basic needs.

1. Make observations about living things and their environment using the five senses.
2. Describe and model life cycles of living things.

#### **Essential Questions:**

- How can we make good observations?

#### **Enduring Understandings:**

- The scientific process starts with observation.

#### **Objectives:**

##### **Students will...**

- Make at least 5 observations about a plant using their senses (except taste and sight).
- Draw and label a picture of their plant with their observations.

#### **Materials:**

- Blindfolds (e.g. bandanas) (1 per 2 students)
- Area with plants (e.g. schoolyard)
- Paper (1 per student)
- Writing utensils (e.g. crayons, markers, colored pencils)
- Field guides (optional)

#### **Key Vocabulary:**

- Observation: Something that is learned through our senses.

#### **Procedure:**

1. Take students to an area with plants. This could be the schoolyard, a nearby park, or an undeveloped area.
2. Divide the class into pairs. Hand out a blindfold to one person in each pair.
3. Have the person that can see guide their blindfolded partner to a plant (e.g. tree, shrub, or grass). The partner that is blindfolded must use their senses other than sight (and taste) to make at least 5 observations about the plant (e.g. texture of the bark or stem). After making observations, have the seeing partner lead the blindfolded partner back to the starting location – only then can they remove the blindfold.
4. Let the students that were blindfolded try to find which plant they just met.
5. Have students switch with their partners and meet a different plant.
6. Ask students to draw (and label depending on their abilities) their plant and include their observations.

**Additional Activity/Extension:**

If you have or can create field guides or simplified keys or charts for the plants that grow in the area you take your students to, they can use those materials to identify their plants.