



Pre-Program Resource

Storytime in the Garden

Pre-K-1st Grade

What Plants Need to Grow Mini Lesson & Craft

Duration: 30 minutes

Objective: To prepare students for their field trip to Tudor Place by learning key vocabulary and ideas. Students will learn what resources plants need to grow and compare the needs of plants and people. Students will practice what they've learned about plant needs with a craft.

NGSS Standards Met:

K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.

LS1.C: Organization for Matter and Energy Flow in Organisms

- All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)

ESS3.A: Natural Resources

- Living things need water, air, and resources from the land, and they live in places that have the things they need. (K-ESS3-1)

LS1.A: Structure and Function

- Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)

LS2.A: Interdependent Relationships in Ecosystems

- Plants depend on water and light to grow. (2-LS2-1)

Materials Needed:

Plant timelapse video

Link to presentation:

<https://docs.google.com/presentation/d/10qclA9tQFLtVIBcso5M2QToBQUWGPnXP16M8VzDS1-U/edit?usp=sharing>

Drawing paper or craft resource printout

Coloring materials (markers, crayons, colored pencils, etc.)

Intro Video and Plant Learning

Link to presentation:

<https://docs.google.com/presentation/d/10qclA9tQFLtVIBcso5M2QToBQUWGPnXPI6M8VzDS1-U/edit?usp=sharing>

Tips for the Presentation:

Questions/prompts will automatically appear. Click to go to the next slide or reveal an answer. Everything else is animated. You may want to run through the slides a time or two first to become familiar with the presentation.

Start with plant growth timelapse growing video

- Do a brainstorm based on the video
 - Ex) What did you notice? Why do you think that happened? What is it? What is it doing?

Lead a short discussion about what humans need to grow (food, water, a place to live, etc.)

- On one side of the board, write the things that humans need to grow
 - Food, water, air, a place to live

Use that as a jumping off point for thinking about what plants need.

- Write the things plants need to grow on the other side of the board
 - Water, sunlight, place to live, dirt, air

Have students compare the two sides. What do they have in common? What is different?

Emphasize the differences and commonalities with questions:

- Ex) Do humans need to eat dirt? Do plants need pizza? Do both need water?

Key Idea: Plants have specific parts that help them survive and grow that are different from what animals have.

- Animals, like humans, *eat* food and *drink* water with their mouths.
- Plants don't have mouths, but they do have parts to help them make food and drink water

Draw a flower on the board and label its various parts with the students.

- Roots: drink up water and nutrients/minerals from the ground
- Leaves: absorb sunlight to make food for the plant
- Flowers and seeds: help make more plants
- Stem: holds the plant up so it can get sun and water
- Plants need: water, sun, air, a place to grow/soil

Optional: Use the slide after the video for interactive learning of plant parts.

- The presentation will prompt students to identify key plant parts and needs.
- Ask students for responses before revealing the answer on the blank line by clicking.

Modification Options

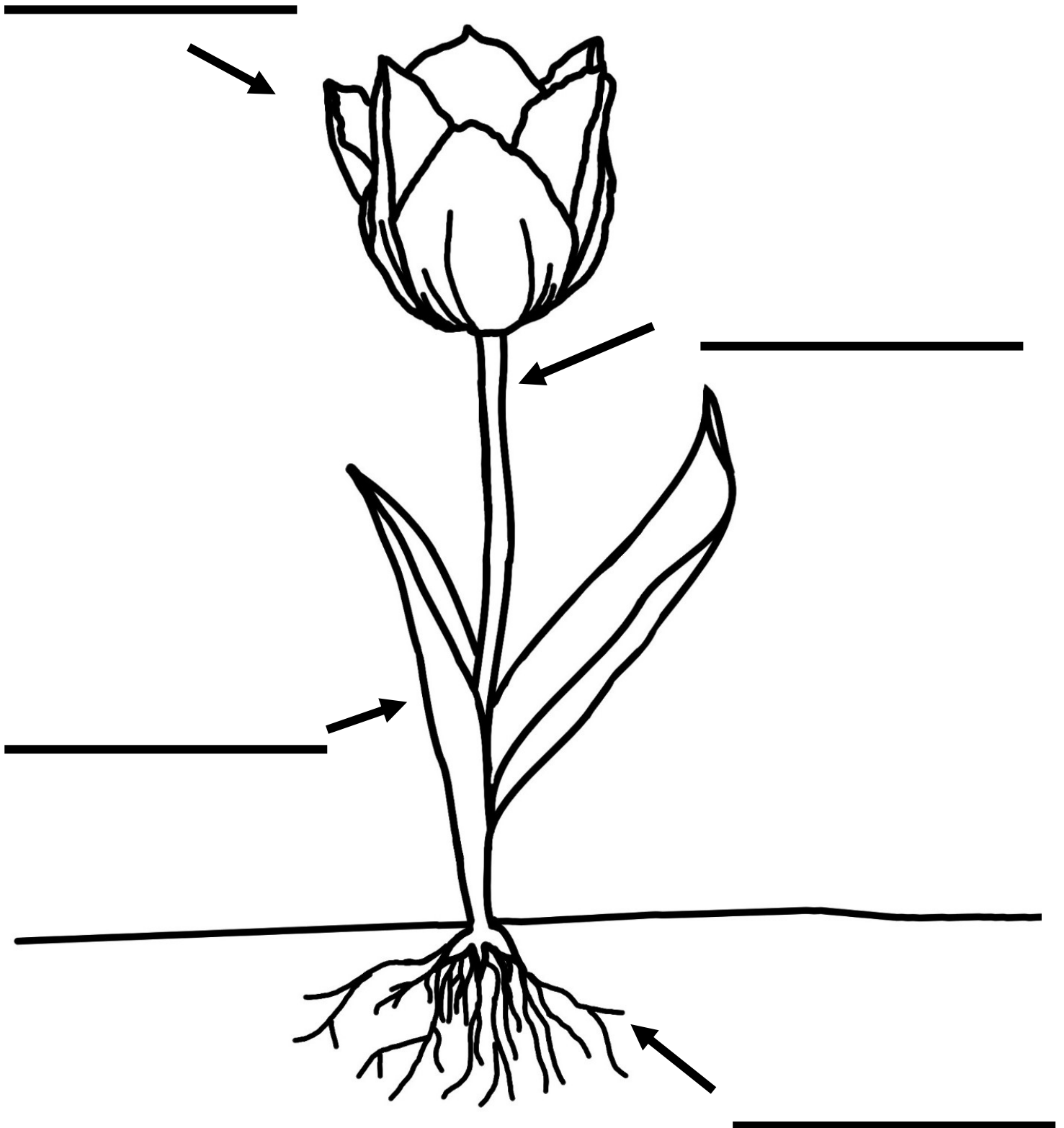
- *Option:* split the room up into 'people' and 'plant' groups. Have them brainstorm and share with the group
- *Option:* create a Venn diagram comparing what humans versus plants need to practice comparative graph making

Craft

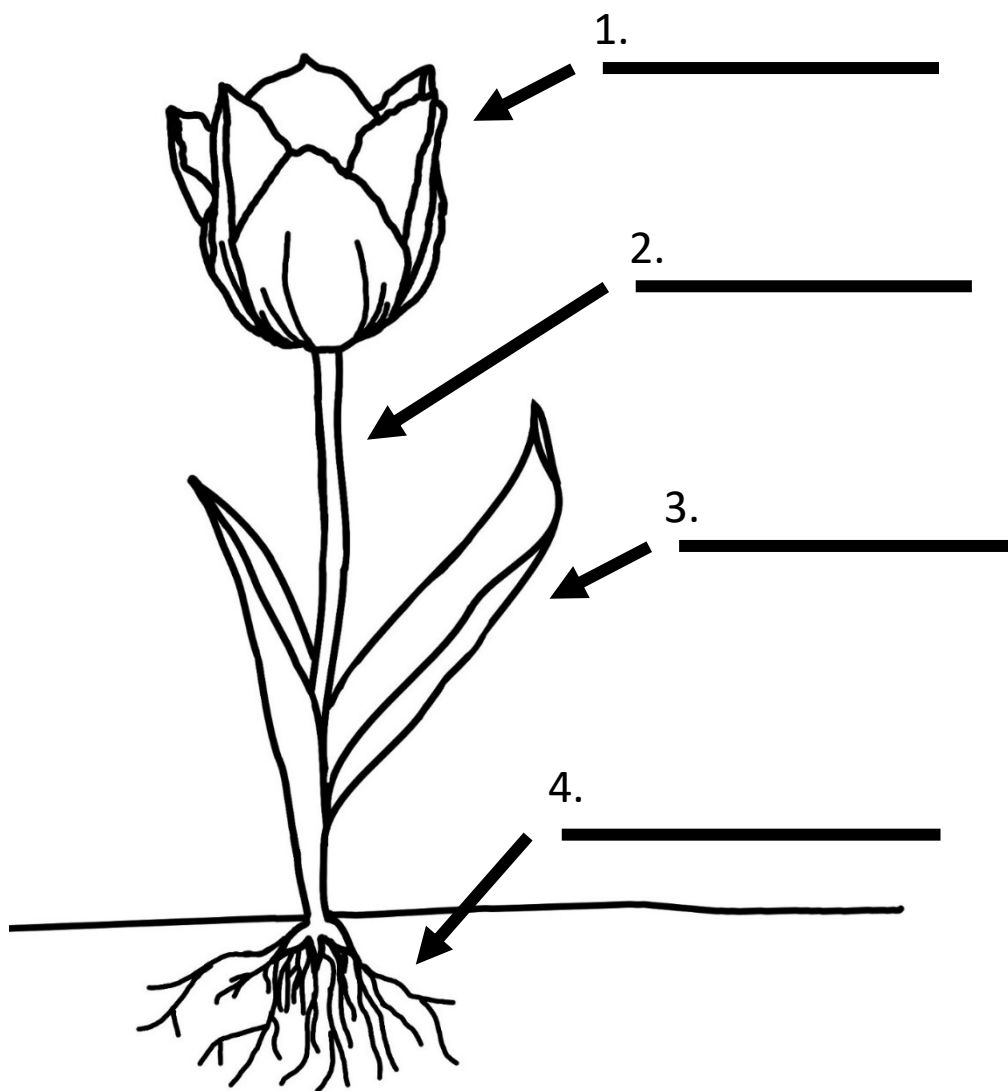
Students will apply their learning by drawing a plant with all its parts and the things it need to grow.

Option: use the below coloring sheet with built in labels

Color the Tulip and write its parts!



Match the plant part word to the drawing and color the tulip!



Word Bank

- A. Stem
- B. Roots
- C. Petals
- D. Leaves

Write 3 things that plants need to grow:

1. _____
2. _____
3. _____