

Subject: TAG

Note: TAG instruction occurs one day a week for each student. These plans are meant to replace the time that would be spent on core learning activities (reading, ELA/writing, math, social studies/science) for that one day each week. Students should still complete activities for specials classes (art, music, PE) on their TAG day.

Grade: K-2

### TAG Learning Packet Week 2

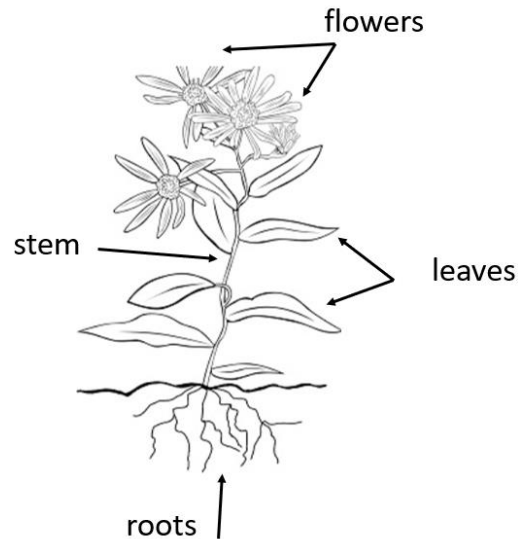
Standard	Science- S1L1 Obtain, evaluate, and communicate information about the basic needs of plants and animals.  TAG – CPS 3 Incorporates brainstorming and other idea-generating techniques (synectics, SCAMPER, etc.) to solve problems or create new products
Brief Description	Students will learn about plants. They will read about the parts of plants, basic needs of plants and how plants reproduce. Students will use their knowledge and creativity to complete the SCAMPER activity. The opportunity to create a model of a plant using household items is an optional ending to the lesson.

Student Directions:

- Read the information about plants.
- Complete the SCAMPER activity.
- Create a model of a plant using household items.

# PLANTS

Plants are important to life on Earth. They keep people, animals and the Earth healthy. Plants provide food, medicine, shelter, and the oxygen we need to breathe. Plants have basic needs, just like humans. Air, water, light and nutrients are all needed for a plant to survive. The basic parts of plants are roots, stems, leaves and flowers.



The roots grow down into the soil and hold the plant in place. They soak up the nutrients and water that the plant needs to survive. They also store food for the plant.

The stem helps the plant stand tall. Tubes inside the stem carry nutrients and water to the plant.

Leaves make the food for the plant. They capture the sunlight and use it to make food. They take in carbon dioxide and release oxygen into the air.

Flowers make the seeds for the plant. The seeds are needed to make more plants.

Seeds of plants are moved around to different places in order to create new plants. They are moved in different ways.

1. Some seeds are moved by the wind. You may have seen some floating in the air.
2. Some seeds are made to pop and throw themselves into the air to move to new places.
3. Many seeds are carried by animals. Some seeds are made to attach to the fur and be moved around with the animal and dropped in a different place. Some seeds are surrounded by a tasty fruit. Animals are attracted to the smell and will take the fruit to eat. The seed will be left behind.

# SCAMPER

Use the knowledge you have learned about plants plus your creative imagination to answer the SCAMPER questions. Take a picture of your work to share with your teacher.

**S- Substitute-** How would plants change if their basic needs were darkness, soda and wind?

**C- Combine** – What edible plants can you create by combining two different seeds? (For example, combine a lettuce seed and a tomato seed to make Lettato - perfect for your burger.)

**A- Adapt-** What is another way that seeds could be moved to new places?

**M- Modify-** Do you think it would be good or bad if all seeds were made to produce the same color fruit, vegetable and flower? Explain your thinking.

**P- Put to a new use-** What would happen if, after eating fruits and berries, birds used the seeds in their nests instead of dropping them?

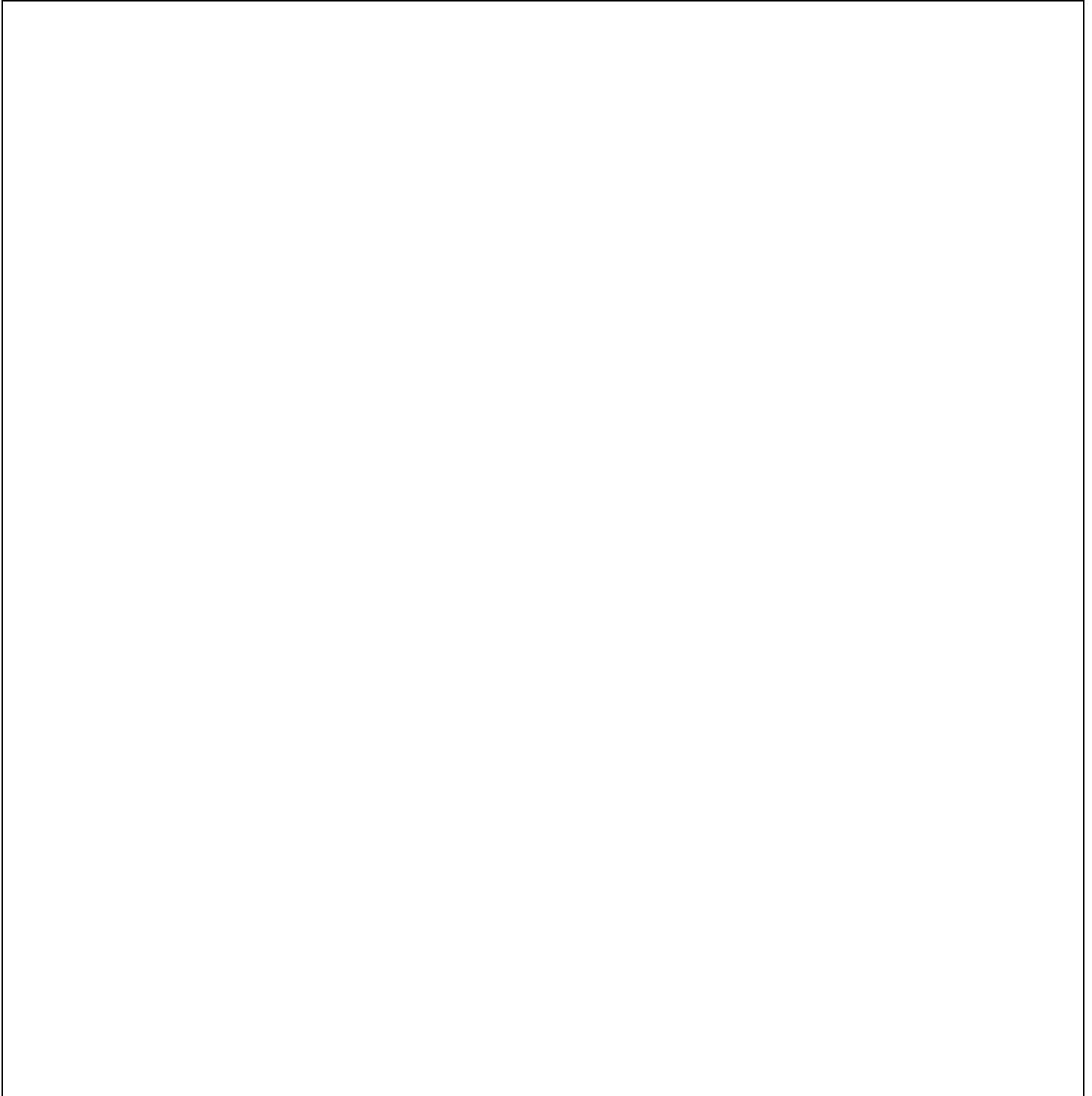
**E-Eliminate** – How would life be different if flowers had no color or taste?

**R- Rearrange-** Draw a picture of what a plant would look like if the roots grew above the ground and the leaves and flowers grew under the ground. Label the parts.

Optional Ending Activity:

Create a model of a plant using household items. Be sure to include flowers, stem, roots and leaves. If you want to really impress your teacher, include seeds. Take a picture of your work to share with your teacher.

Use this space to brainstorm ideas.

A large, empty rectangular box with a thin black border, intended for students to brainstorm ideas for their plant model project.