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idea packet

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Think Twice Eat Right

Think Twice, Eat Right!

How to make students more involved in the garden while still following the Pacing Guide. Many benefits derive from having a garden, its more than just eating healthy. It's all about learning in an outdoor environment.



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Humus

Materials: empty juice carton, organic soil, water, food scraps (juicing scraps are best). Wooden stick (tongue depressor).

Teacher will precut empty juice boxes sideways as to create a door.

Each student will add one cup of soil, 1 cup of food scraps, one quarter cup of water then students to mix.

Seal box with tape to transport outside.

Students will go to their box daily and turn their humus with a wooden stick.

After three weeks students, students should dig holes within their garden bed to pour humus into.

Encourage students to document this activity and their daily observations in their journals.



It's In the Soil

To grow a healthy garden, you have to start with the soil. **Humus** (*hyoo-mus*) is an important part of great soil. Earthworms and other living things help make humus in nature. You can also make your own humus. To find out how, read the directions below. Then answer the questions.

Materials

a clean, empty milk or juice carton; soil; fruit and vegetable scraps; scissors; duct tape

Directions

- Step 1: Close the open end of the carton and seal it with tape.
- Step 2: Ask an adult to cut a square flap from one side of the carton. Then lay the carton on its side, open side up.
- Step 3: Tear some fruit and vegetable scraps into little pieces. Put them into the carton.
- Step 4: Cover the food scraps with a thin layer of soil. Mix everything together.
- Step 5: Add more scraps and soil every day until the mixture is about an inch from the top of the container. Stir well each time.
- Step 6: Stir the mixture once a day for about three more weeks. Add water if it looks dry. Now you have humus.
- Step 7: Add the humus to your garden. Start planting!



1. In which step do you begin to put fruit and vegetable scraps into the carton?

2. True or false: You are supposed to add more scraps and soil until the carton is completely full. _____

3. What parts of fruits and vegetables might be used as scraps?

4. What do you think happens when you add humus to a garden?

Research

Materials: internet, computer, tablet. Search using Google or Bing

Students will choose a plant from the garden to research. The research should include the scientific name of the plant, its origin, and location on a world map. Students should also report on the plant's properties and medicinal benefits.

Lesson extension: Students should also include 5 facts from the country of the plant's origin.

LAFS.K.W.1.2, LAFS.K.W.1.3, LAFS.K.W.3.7, LAFS.3.RI.4.10, LAFS.3.W.2.6

SS.3.A.1.2



Garden Math

One of the easiest lessons to do is to ask students to measure their plants prior to planting.

Students are placed in groups of 3 and take turns performing different activities.

Student A will hold ruler while student B holds seedling.

Student A will measure seedling from tip to bottom of the pot in which it is housed.

Teacher will take the opportunity to remind students that rulers have two different units of measures.

Student C will be kneeling next to garden bed as student A states the measurement of how deep the hole needs to be.

Student B will hand off the seedling to student A, then it will be his turn to measure the width, this information will then be passed to student C.

Once the hole is started, Student C will receive ruler and report his progress on how the hole is coming along.

Once these three students agree that hole is big enough, student B will slowly removing seedling from temporary pot (assisted by teacher).

Student B will place seedling in hole and will be instructed by teacher to hold on to branches as plant gets lowered into the ground. Student C will then cover the hole assisted by student A.

Student A will fill up water can and deliver to student C who will be instructed by teacher as to the importance of watering the roots as opposed to watering the leaves.

This process works as students alternate their roles.

MAFS.K.MD.2.4, MAFS.K.1.2, MAFS.3.G.1.1, SC.K.N.1.1, SC.K.N.1.2, SC.K.N.1.3, SC.K.N.1.5



Sequencing

Students will create a recipe for making smoothie.

Materials: Ninja or other blender, vanilla yogurt, cinnamon powder, frozen fruits (peach, mango, pineapple), vanilla extract, plastic cups, measuring cups, cooler, milk, wooden spoons, and a dry erase board.

Encourage students to decide what ingredients will be placed first in the blender as they write in their journals the quantity of each ingredient as teacher models on the dry erase board how they should write their recipe.

The steps should be written in a list format. Students will also draw and label drawing of all materials used with their corresponding measurements.



Tomatoes

You cannot have enough tomatoes.

Once tomatoes are ripened, they will become red, yellow, and or remain green depending on the species. Students will need to understand that many fruits grow green initially and then change color as they ripen. They may turn many shades of colors before ready for harvest.

Once students are done with the wash, teacher will cut several key limes and hand them to students along with the lime press, so they get the lime juice. Students will then cut basil leaves into small pieces over the tomatoes. Students will be handed the olive oil bottle with spout. They will pour olive oil all over tomatoes and basil, then mix.

By year end students will no longer use lime and olive oil. As I observed, they harvest their tomatoes and wrap the basil leaf around it and pop directly into their mouth.



From Seed to Tree

The diagram below shows the life cycle of a tree. Use it to answer the questions.

1

A tree starts out as a tiny seed. With soil, moisture and warmth, the seed becomes a seedling.



2

As it gets bigger, the young tree is called a sapling.



Cycle of Life

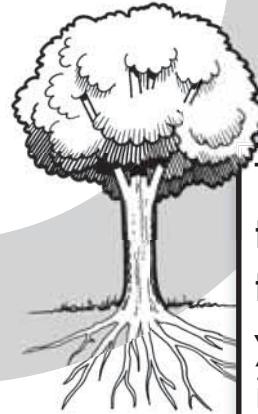
4

When it gets very old, the tree dies. As it decays, it mixes with the soil and becomes food for new trees.



3

The tree gets taller and thicker every year. At last, it is full grown.



Source: Adapted from Minnesota Department of Natural Resources

1. How does a tree start out? _____
2. True or false: A full-grown tree is called a sapling. _____
3. What happens to a tree when it dies? _____

Bonus: Why is it important to plant new trees? Write three reasons on the back of this page.

Name Date

A Harvest Schedule

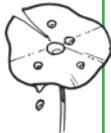
It's harvest time at the Farm at Miller's Crossing, in Hudson, New York. This schedule shows when some crops are ready to be picked. Use the schedule to answer the questions.

	June	July	August	September	October	November
 Broccoli						
 Carrots						
 Celery						
 Lettuce						
 Potatoes						
 Tomatoes						

- When can broccoli be picked? _____
- In which month are the most crops picked? _____
- Which crop is picked for the shortest period of time? _____
- Which crop is picked for the longest period of time? _____
- Which crop can be picked for about two months? _____
- Who do you think would find this harvest schedule useful? Explain. _____

Take It from Nature

Inventors often study nature to get new ideas. The chart shows some plants and animals and the inventions inspired by them. Use it to answer the questions.

PLANT OR ANIMAL	FEATURES	INVENTION INSPIRED BY THE PLANT OR ANIMAL
Boxfish 	Using little energy, the boxfish can easily start, stop, back up or zigzag through the water.	A car that is fast, maneuvers easily and is fuel-efficient
Gecko 	Thousands of tiny hairs on a gecko's feet allow it to stick to walls and scurry up them without falling.	Super-strong tape that can be attached and reattached thousands of times
Lotus leaf 	A lotus leaf cleans itself. How? Its leaves are bumpy. Raindrops collect on the bumps and roll off, carrying dirt with them.	A paint that cleans itself
Butterfly 	A butterfly's wings have layers of fine scales that reflect sunlight and create a brilliant, colorful effect.	Cell-phone screens made with layered mirrors are colorful and glare-free, and use very little energy.

- A strong tape is modeled after which animal's ability to walk up walls? _____
- How does a lotus leaf clean itself? _____

 Why might a self-cleaning paint be useful? _____

- What model did inventors use to create colorful, glare-free cell-phone screens? _____

- Why did inventors model a car after a boxfish? _____

- Why do you think it might be helpful to copy nature when inventing something new? _____

BONUS: Go outside and study nature. Look at the way a squirrel climbs a tree. Watch a bird soar through the sky. What invention can you imagine based on what you see? Write your ideas on the back of this page.

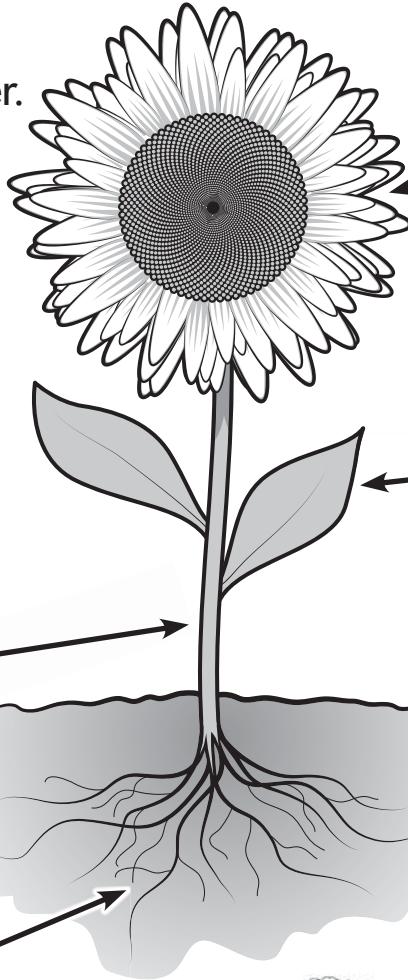
Name

Date

From Seed to Flower

Help Curious George label the parts of a flower.

1. Cut out the names of each flower part below.
2. Paste them in the correct boxes.



✂

petals	stem	leaf	roots
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Bonus: Which part of the flower grows underground? _____

Watch *Curious George*® on **PBS KIDS**®!

Explore pbskids.org/curiousgeorge. Click on Busy Day, and play Flower Garden to help count the flowers in George's garden.

Go to curiousgeorge.com for more online fun.

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- Grant recipients recognized at an Awards Reception

To apply, you must contact the teacher who developed the idea before submitting your application. Contact can be made by attending a workshop given by the disseminator, communicating via email or telephone, by visiting the disseminator in their classroom, or by having the disseminator visit your classroom.

Project funds are to be spent within the current school year or an extension may be requested. An expense report with receipts is required by June 15th.

**APPLICATION DEADLINE:
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For more information, contact:

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