My Seed Journal

Name: _____

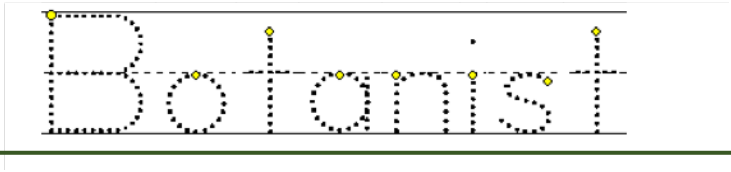
RED BUTTE GARDEN
THE UNIVERSITY OF UTAH

Date:_____

Lesson 1: Journey to the Center of a Seed

Draw yourself as a scientist including the tools you will need to make *observations.*

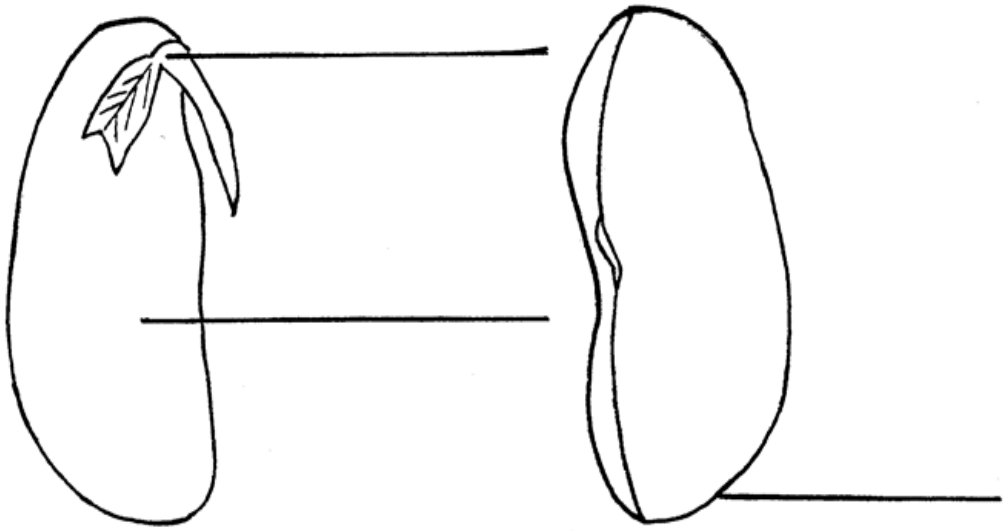
Trace the word *Botanist* and draw what a *Botanist* studies.



Date:_____

Write or draw what *observations* you made using your Five Senses during the seed dissection.

Label Seed Diagram then write or draw what each part does for the seed.



Seed Coat

Embyro

Food Storage

 Date:_____

Write the translation of Brassica rapa. (*Hint: Brassica is a yellow sauce often put on hotdogs, rapa is another word for quick)*

Brassica rapa

Draw what you predict your *Brassica rapa* will look like when it grows.

Date:_____

Draw how you planted your seed, including all the materials you used.

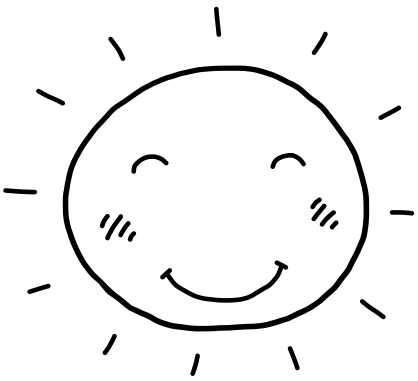
Soil ***Seeds*** ***Vermiculite*** ***Fertilizer***

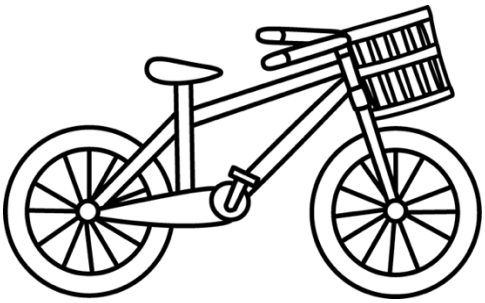
What do you *predict* your seeds need in order to wake up?

 Date:_____

Lesson 2: Germination and Sprouting

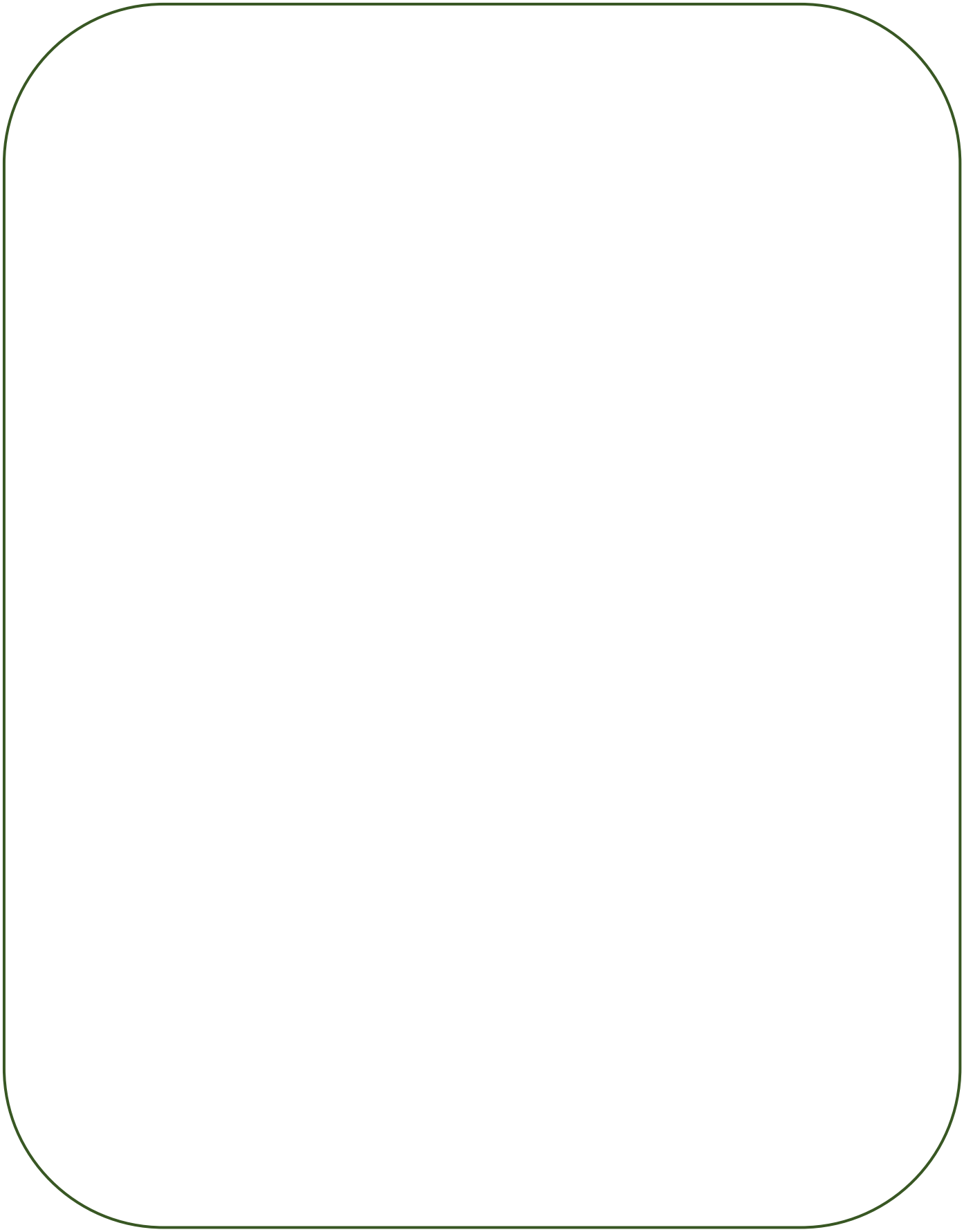
Circle the things you predict your seeds need to *germinate* or "wake up".

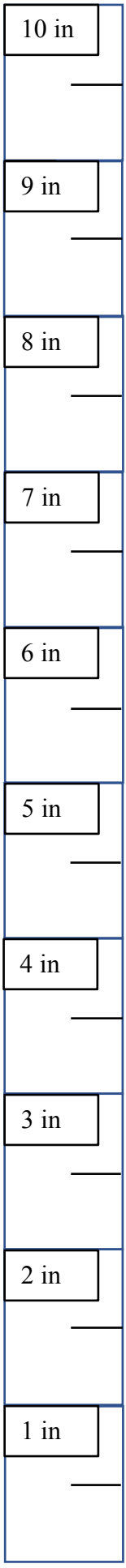




Date:_____

Has your seeds *germinated*? Make some new *observations* about your plant then draw what your plant looks like today, including the things it might need to keep growing.





Date:_____

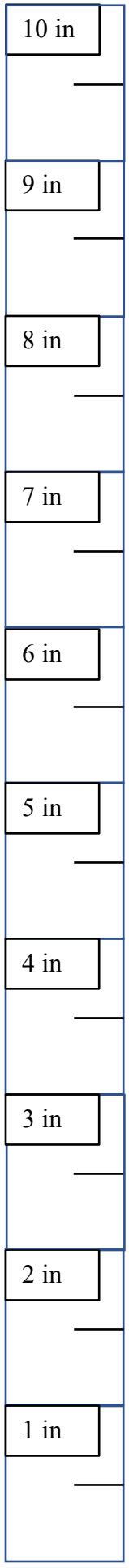
Lesson 3: Plant Parts and Functions

Practice writing the plant parts and then draw the part in the box provided.

Leaves

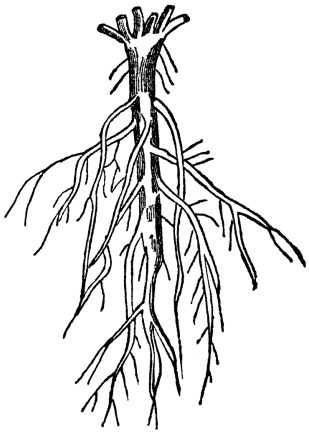
Stems

Roots

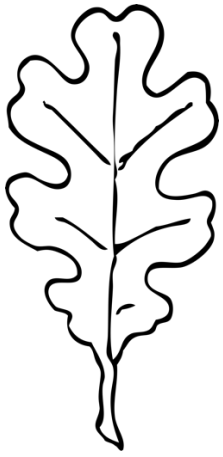


 Date:_____

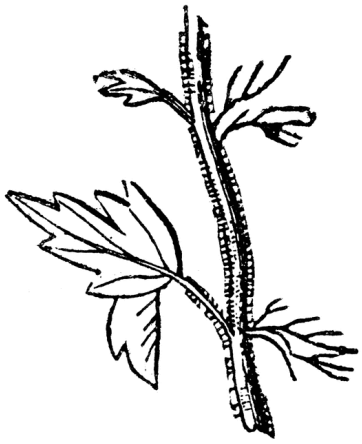
Directions: Draw or write what each plant parts "job" or *function* is.



Roots



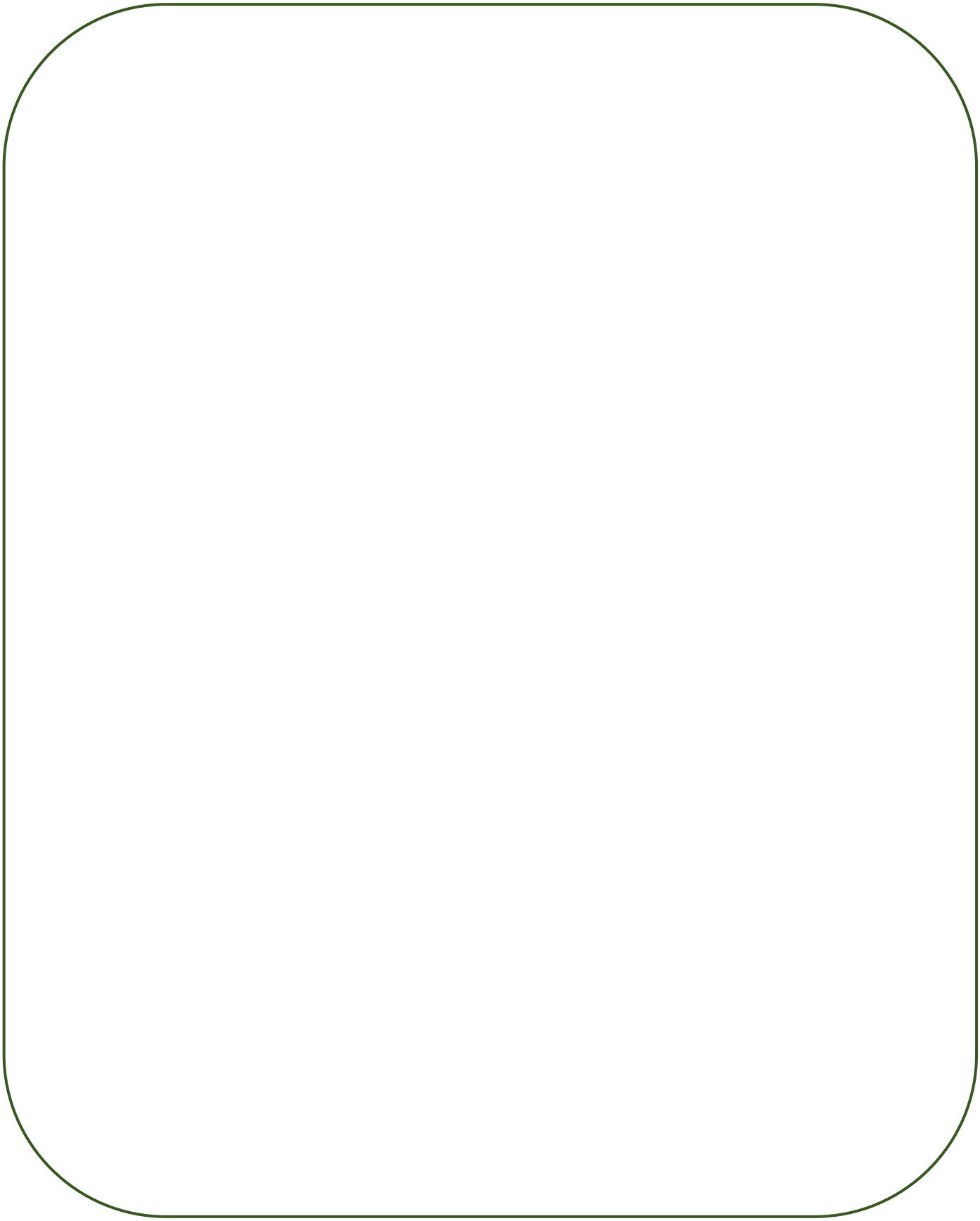
Leaf

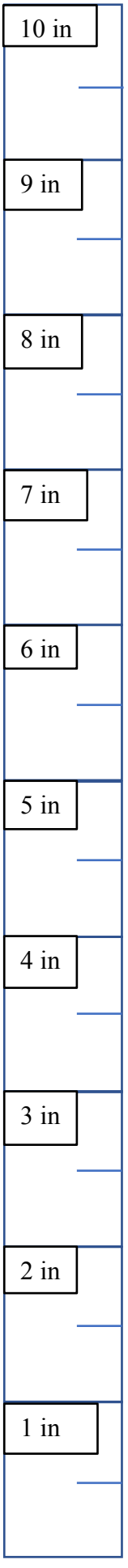


Stem

Date:_____

Measure your *Brassica rapa* plants and draw what your plant looks like using your plants real height.





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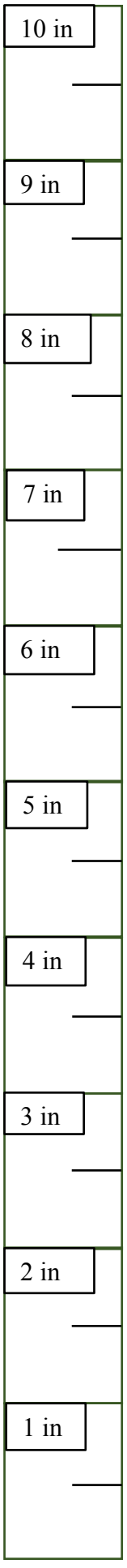
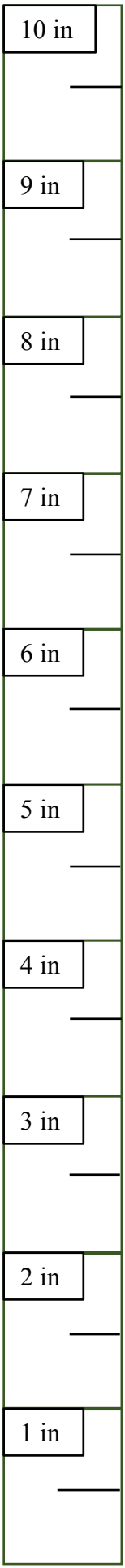


Date:_____

Lesson 4: How Light Affects Plant Growth.

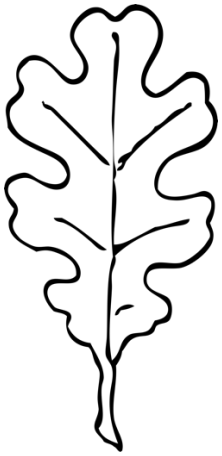
Draw what you predict your *Brassica rapa* would look like if it didn't get any sunlight. Then compare to the *Brassica rapa* that has been kept away from light.

Was your prediction right? Explain why you think this *Brassica rapa* looks different than your *Brassica rapa* that has been under the lights.



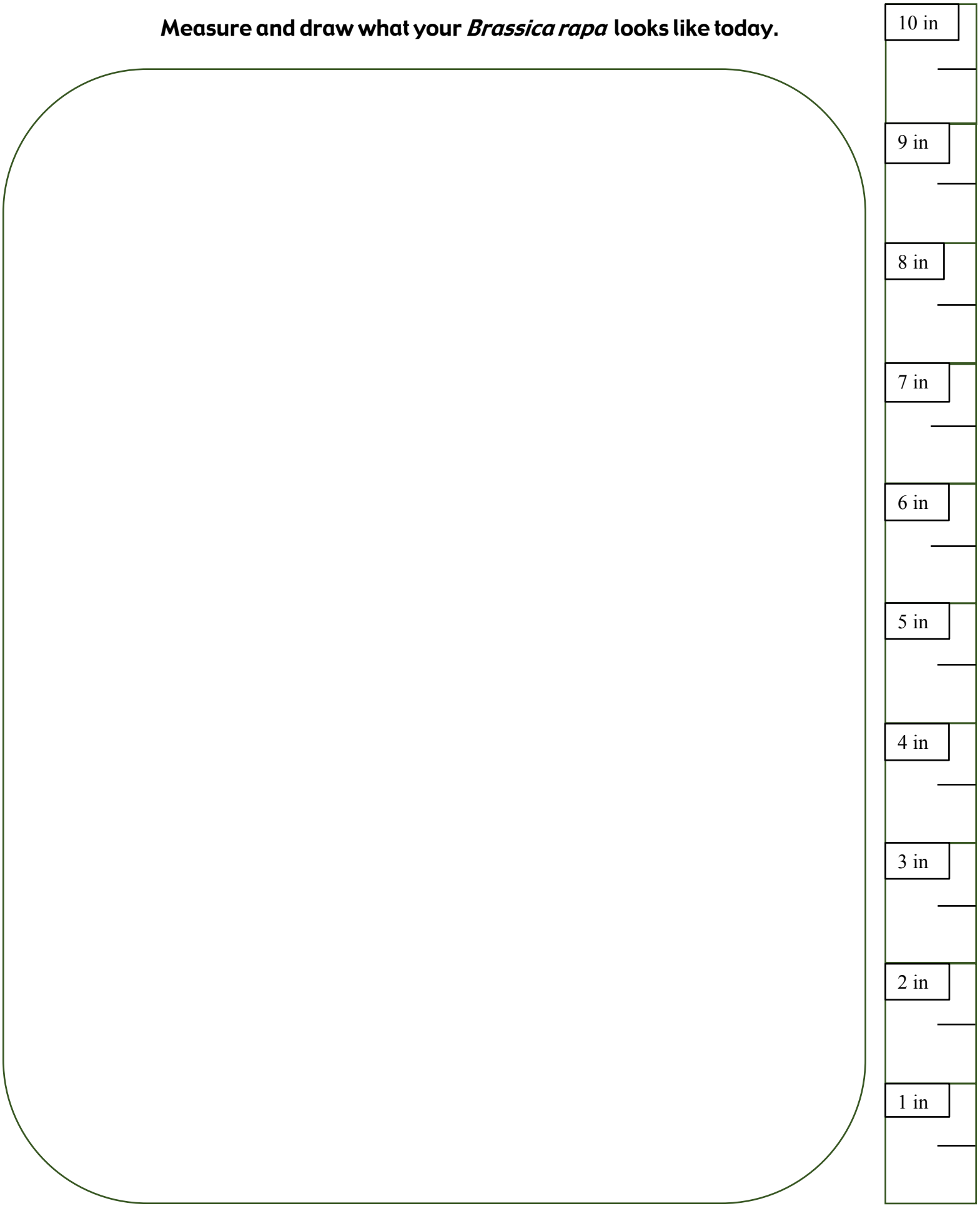
 Date:_____

Directions: Draw or write how leaves make food for the plant. This process is called *photosynthesis*. *(Hint: Just like baking cookies, there is a recipe for plants to make food. What ingredients does the leaf need? Once the leaf has those ingredients what does it make?)*



Date:_____

Measure and draw what your *Brassica rapa* looks like today.



 Date:_____

Lesson 5: Flower Parts and Functions

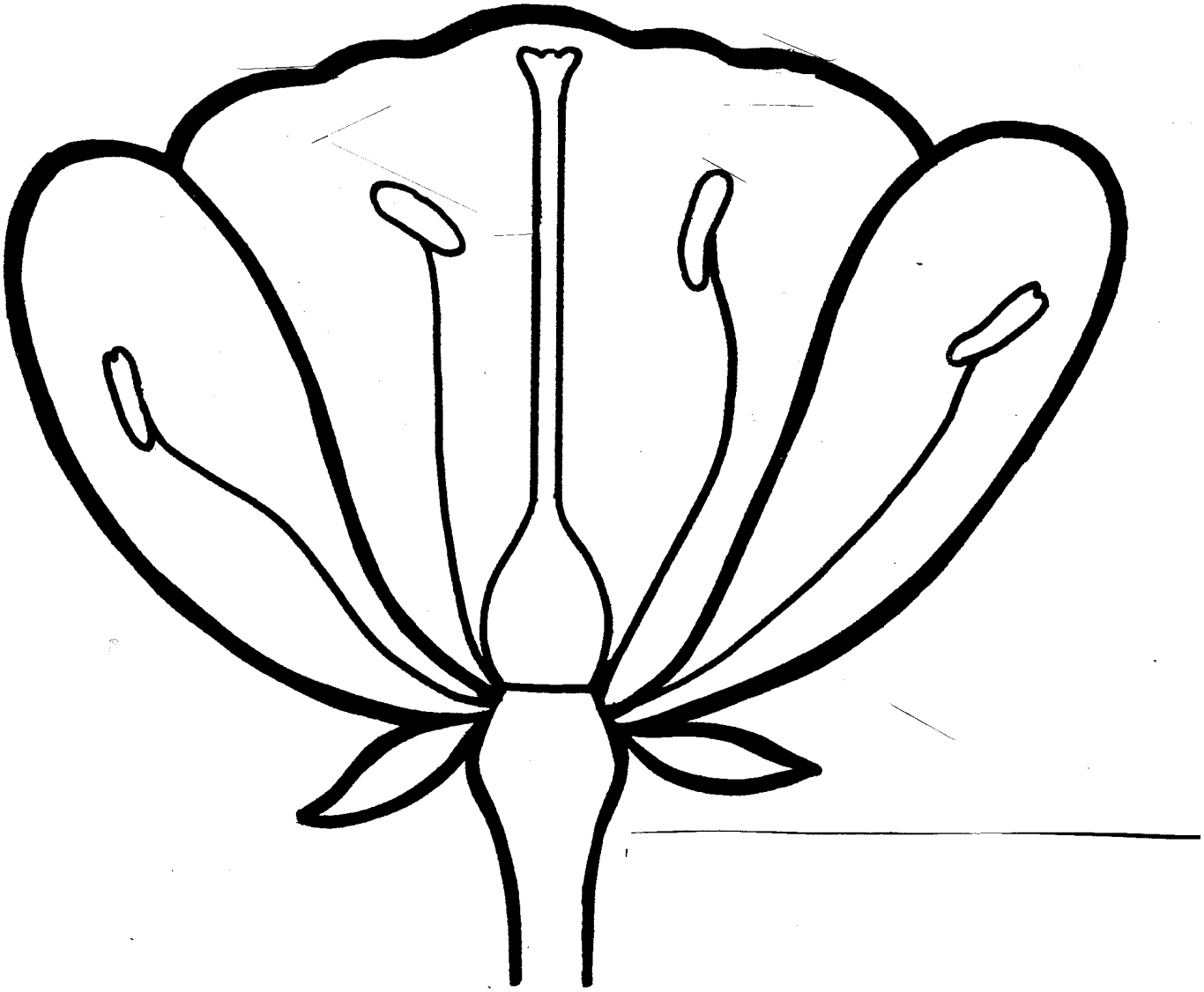
During flower dissection tape each part in the correct box. Or draw each flower part in the correct box.

Petal	**Sepal**
Pollen	**Stamen**
Pistil	**Ovule**

Pick your favorite flower part and explain its "job" or function.

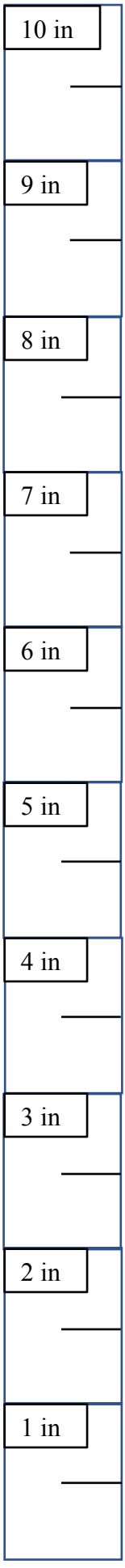
 Date:_____

Color petals red, color pistil blue, color stem green, color stamen yellow



Date:_____

Measure and draw what your *Brassica rapa* looks like today.



 Date:_____

Lesson 6: Pollination and Symbiosis

Draw a pollinator and a flower your *pollinator* would want to visit. Include flower parts we learned about in the last lesson.

 Date:_____

Explain what *pollination* is, remembering what we learned about the different flower parts.

Will flowers produce *seeds* if the flower doesn't get *pollinated*? Circle your answer:

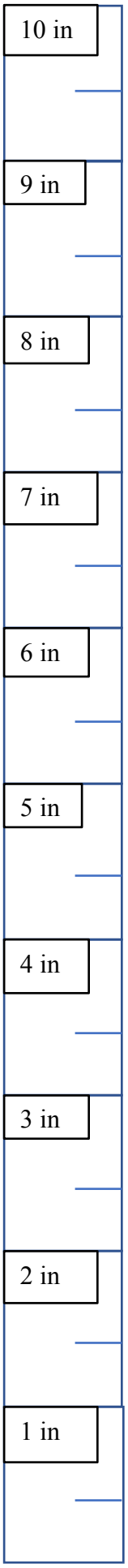
YES NO

Date:_____

Draw or write how insects and animals help plants. Also include how plants also help insects and animals. This process is called *symbiosis*.

Date:_____

Measure your *Brassica rapa* and draw your *observations*.

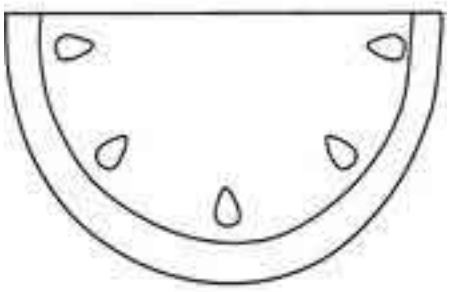


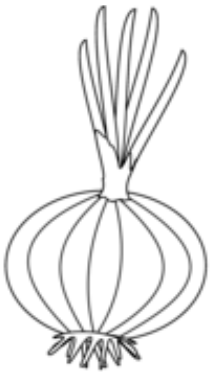
 Date:_____

Lesson 7: Fruits and Adaptations

Circle *fruits* and color the seeds red. (Hint: there are 5 fruits on the page)

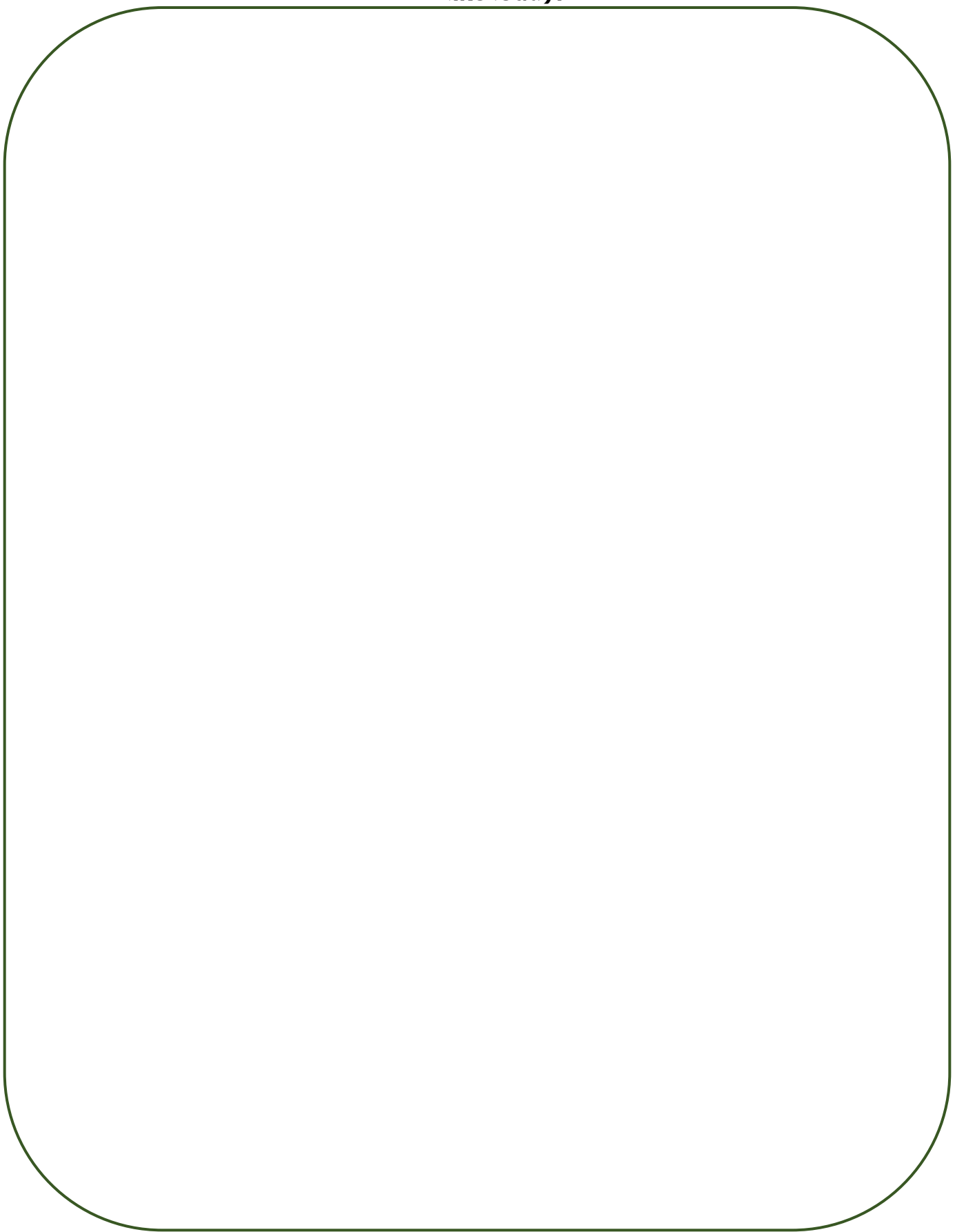





Date:_____

Measure and *observe* your *Brassica rapa* then draw what your plant looks like today.



Date:_____

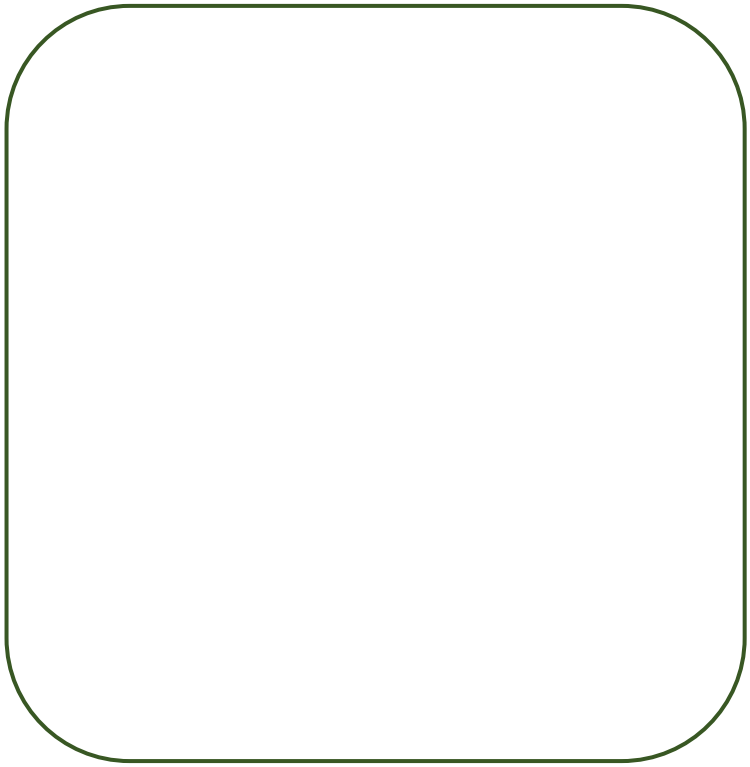
Draw your favorite *fruit*. Where are the *seeds* found?

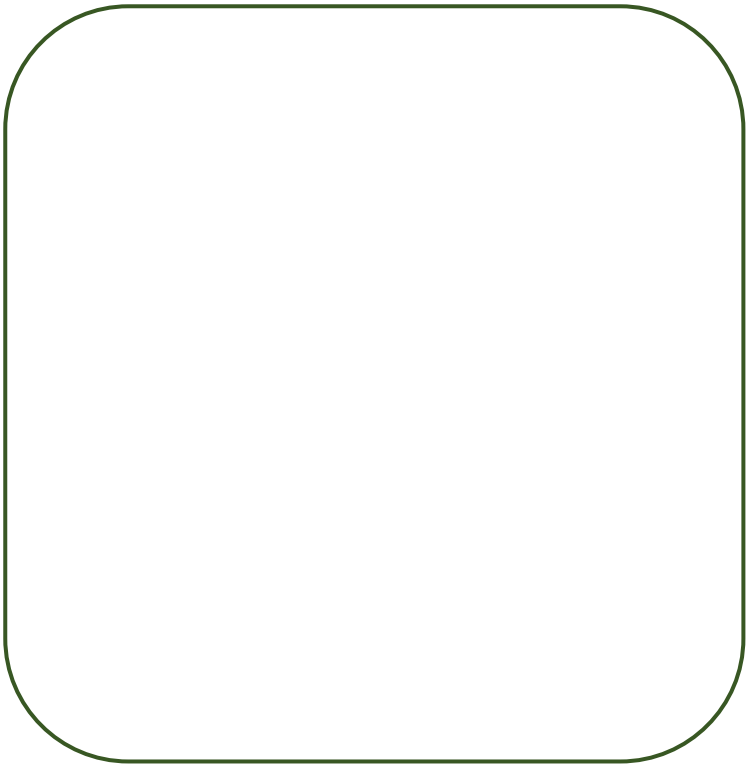
How are fleshy fruits an example of a *plant adaptation*?

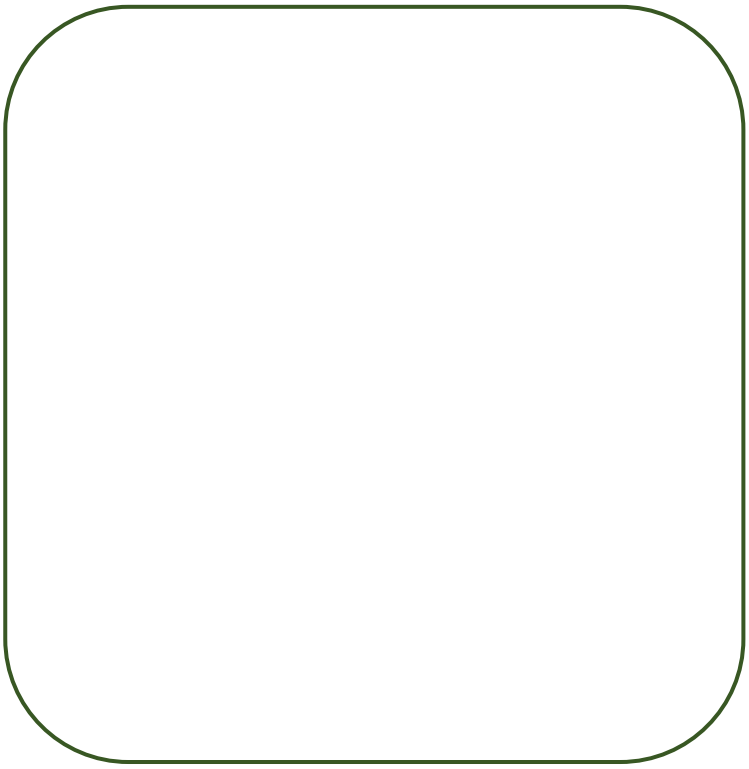
 Date:_____

Lesson 8: Seed Dispersal and Cycle of Life

Draw three ways a seed is *dispersed*.

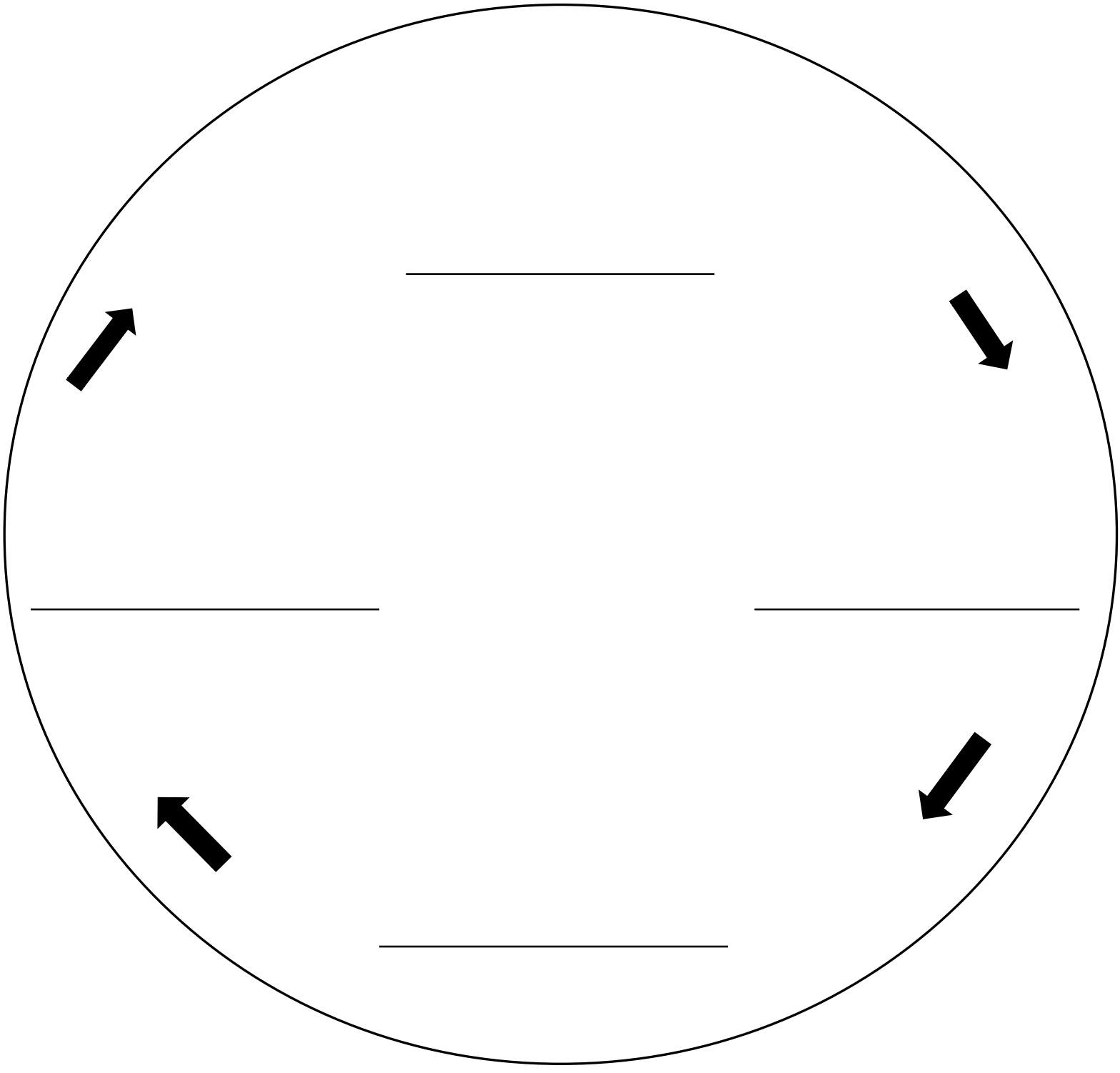






 Date:_____

Draw the *life-cycle* of your Brassica rapa plant. *(Hint: Include seeds, germination, stems, leaves, roots, flowers, pollinators, fruits)*



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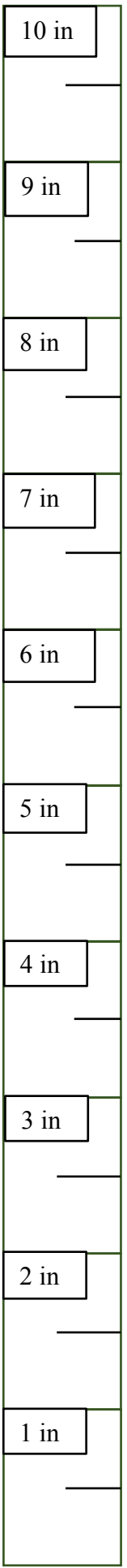

Date:_____

Draw your daily observations

Date:

Date:

Date:

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Date:_____

Date:

Date:

Date:

Date:

Date:

Date:

Date:

Date:

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 Date:_____

Important Scientific Words

Lesson 1:
Scientist: A person who studies things.
Botanist: A scientist who studies plants.
Seed Coat: The protective, outter layer of the seed.
Embyro: The baby plant.
Food Storage: The energy for the embryo, also called endosperm.
Prediction: Making a best guess.
Observation: Using five senses to study things.

Lesson 2:
Germintate: When a seed wakes up.
Sprout: When a plant begins to grow.
Seed leaves: What is left of the food storage.

Lesson 3:
Root: Part of the plant that holds the plant upright and stores nutrients and water.
Leaf: Part of the plant that is the food factory, making sugar for the plant.
Stem: Part of the plant that pulls water up from the roots and pushes food from the leaves down.
Nutrients: A plants vitamins.

Lesson 4:
Photosynthesis: When chlorophyl from inside the leaf takes in sunlight and carbon dioxide and turns it into sugars and oxygen.

Lesson 5:
Flower: Part of the plant that allows it to reproduce (make new plants).
Sepals: The outside parts of the flower that protect the other parts of the flower.
Petals: Part of the flower that is brightly colored to attract pollinators.
Nectar: A sweet liquid produced by flowers which is food for pollinators.

Stamen: The male part of the flower where pollen is made.
Pollen: Yellow, powdery part of the plant that aids in making new seeds.
Pistil: The female part of the flower where baby seeds are made.
Baby Seeds: Seeds before the flower has been pollinated.

Lesson 6:
Pollinator: Something that aids in bringing pollen from the stamen to the pistil so baby seeds can be pollinated.
Symbiosis: A relationship between two living things.

Lesson 7:
Fruit: Fleshy protective part of the plant that conatins mature seeds.
Adaptation: Something that helps living things stay alive.
Dormant Seed: A seed that is asleep.

Lesson 8:
Mature seed: Seeds that have been fertilized and can be planted to grow new plants.
Seed Dispersal: When a seed travels aways from its parent plant in order to avoid competition.
Harvest: When you collect the part of the plant you want when it has finished its life-cycle.
Compete: When a living things fight for the things they need with other organisms.
Plants Life-cycle: When a seed grows, germinates, sprouts, flowers, then produces seeds so new plants can grow.

 Date:_____

References:

http://clipart-library.com/leaf-images-black-and-white.html

https://www.handwritingworksheets.com/print-k/make-pk-all.htm

https://www.kindergartenworksheets.net/handwriting-practice-worksheets/blank-writing-practice-worksheet.html

http://www.supercoloring.com/coloring-pages/fruits/apples

 Date:_____