

The Life Cycle of a Plant:

Is it really so much different than ours?



A 2nd Grade Science/Technology Web Quest/Journal

Notes and Observations By: _____



June 2014

Introduction



Welcome to the wonderful world of botany (the study of plants). Your mission is to observe and draw conclusions about the life cycle of a flowering plant. Then, you'll decide with your partner how a plant's life cycle is different from an animal's.

Your science essential question(s) for this study is:

How do plants change their forms as part of their life cycles?

And:

- ◆ What are the conditions under which a seed will germinate and grow?
- ◆ How are animal and plant life cycles alike and different?

For Information, Communication and Technology you will:

I- Use a graphic organizer to gather and sort information.

C- Use a variety of ways to present your information and observations.


T- Participate in an online learning experience.

Always turn and talk with your partner about your investigations (research) on the Internet. Then, you can enter your ideas and observations in this journal.



The Seed

Listen to Eric Carle's *The Tiny Seed*

Think:  How do you adapt to our changing environment/ seasons in Fairfield? Turn and talk then write.



What would happen if you didn't adapt to the changing environment in Fairfield? Turn and talk then write.



How do seeds help plants adapt? Do you think plants are better at adapting to changing conditions than people are? Why or why not.



2 Go to the lab with your partner. Click on this link from England to learn about what's inside a plant's seed. Look closely at the picture!

<http://theseedsite.co.uk/seedparts.html>



Besides the new root and stem, what's in the seed? Read the paragraph to find out. Why is this needed? Turn and talk then write.

Now click on the link below and carefully look at the diagram.

<http://www.primarygames.com/science/flowers/facts.htm>



What 2 seed parts make up the embryo (baby plant)?

s _____ + r _____ = embryo



3

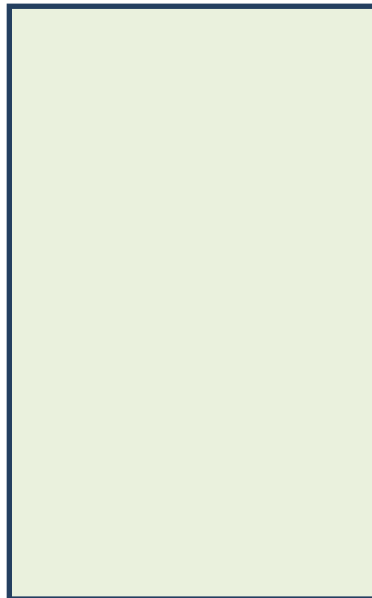
After watching the BrainPop jr movie on "Parts of a Plant,"

<http://www.brainpopjr.com/science/plants/partsofaplant/preview.weml> use the space below to draw a flowering plant. Then label the parts and tell what role does each part play in helping the plant. (Talk to your partner first.)

Seeds

Flower

Stem



Leaves

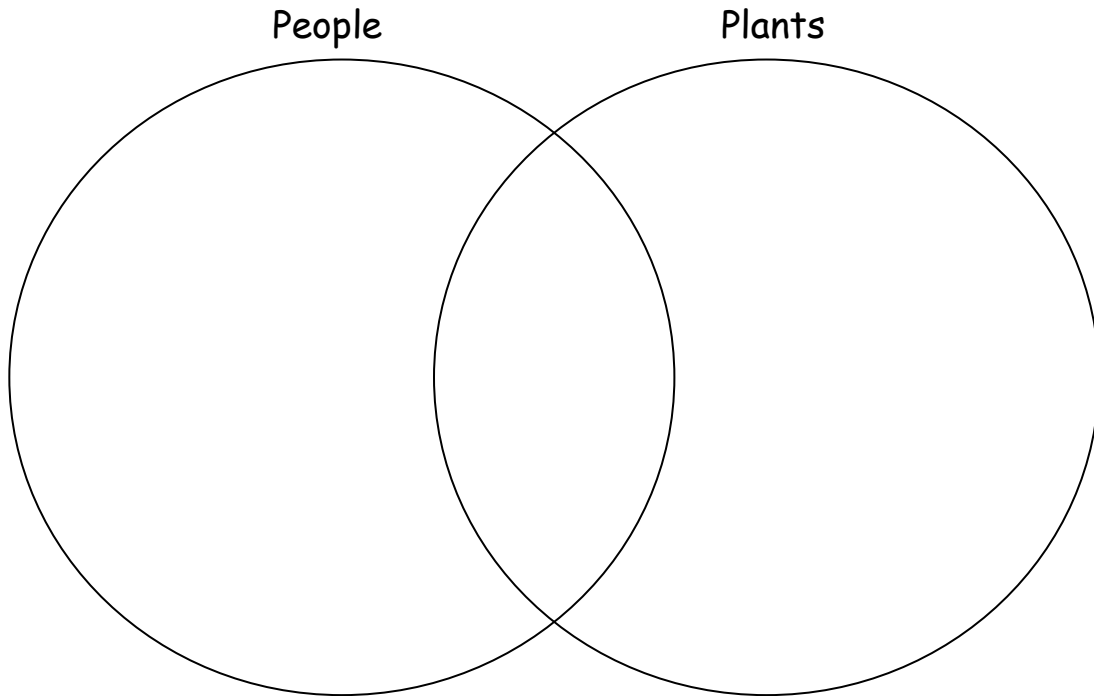
Roots _____

4



Below is a Venn diagram. Scientists often use these to compare and contrast things. Let's use it to compare and contrast people and plant needs. Things that both people and plants need go in the middle area. Talk to your partner then use these words to fill in your Venn diagram.

water air sunlight sleep soil exercise food love



Can you and your partner think of other needs to add?

5



Let's use a game (BrainPop's Gameup) to learn how light, air and water effect plants. Click on the link below and play the game with your partner. Make predictions with your partner.

<http://www.brainpop.com/games/whatplantsneed/>

6



Watch the following Brainpop Jr. video about plant adaptations!

<http://www.brainpopjr.com/science/plants/plantadaptations/>

Now use what you know about the life cycles of people and plants. Look at the human drawing and the plant picture. What advantages for survival does a human have? Does a plant have any advantages?

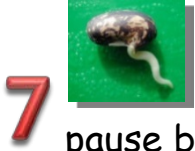


Human advantages

<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Plant advantages

<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>



Watch this video of the life of a small fast growing plant. Use the pause button to stop the action and determine, with your partner, at least 5 important stages, then draw them in your life cycle at the bottom of the page.

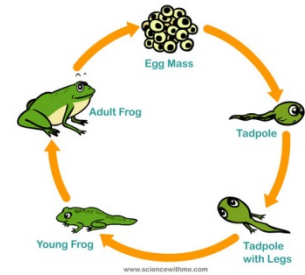
<http://www.youtube.com/watch?v=JumEfAbjBjk>

or you might like this video to decide on your 5 important life stages:

<http://www.youtube.com/watch?v=9CrkJqxhjV8>

Use the drawing of the life cycle of a frog to give you hints for developing your own drawing of the life cycle of a flowering plant. Talk to your partner, draw (and label) the plant cycle as accurately as you can.

Botanists do!



How do plants change their form as part of their life cycle?
