

Subject: Science Grade Level: Third Grade Unit Title: Plants	Timeframe Needed for Completion: 4 to 5 weeks Grading Period: 4th 9 weeks
Big Idea/Theme: Plants and Soil: Do you have a Green Thumb? Understandings: <ul style="list-style-type: none"> • How environment factors affect plant growth • Life Cycle of a plant • Basic properties and components of soil 	
Essential Questions: Illustrate the parts of a seed and label them. How does a seed transform into a plant? How would you classify the basic prosperities of soil? How would you interpret the environmental conditions on plant growth?	Curriculum Goals/Objectives (to be assessed at the end of the unit/quarter) 3.L.2.1 remember the function of the following plant structures as it relates to the survival of plants in their environments: <ul style="list-style-type: none"> • Roots- absorbs nutrients • Stems - provide support • Leaves- synthesize food • Flowers- attract pollinators and produce seeds for reproduction. 3.L.2.2 explain how environmental conditions determine how well plants survive and grow. 3.L.2.3 summarize the distinct stages of the life cycle of seed plants. 3.L.2.4 explain how the basic properties (texture and capacity to hold water) and components (sand, clay, humus) of soil determine the ability of soil to support the growth and survival of many plants.
Essential Skills: <ol style="list-style-type: none"> 1. names and functions of major plant parts: roots- absorb nutrients, stems- provide support, leaves- synthesize food, flowers- attract pollinators and produce seeds for reproduction. 2. environmental conditions determine how well plants survive and grow- drought... 3. parts of a seed- seed coat, food storage, embryo 4. life cycle of seed plant- seed, germination, seedling, adult 5. basic properties of soil components (sand, clay, humus) -texture and capacity to hold water 	Suggested Activities: <ul style="list-style-type: none"> • Dissect lima bean and label parts. • Label parts of a plant and their function in photosynthesis. • Experiment to determine favorable conditions for germination. • Write- compare basic needs of plants to humans • Plant parts foldable (label the parts of the plant root, stem, flower and describe the function of each) • Plant experiment to determine favorable conditions for plant growth. • Compare different soil types and their capacity to hold water- experiment • Plant seeds in different types of soil and compare growth

Vocabulary:

nutrients	chlorophyll	germination
soil	environment	sand
root	life cycle reproduction	clay
stem	pollination	humus
leaf	seed	drought
photosynthesis	seedling	

Materials Suggestions:**Books:**

- *From Seed to Plant* by Gail Gibbons
- *From Seed to Plant* by Alan Fowler
- *How Plants Grow*
- *Flowers, Fruits, and Seeds*
- *Plants and Us*
- *Growing Vegetable Soup*
- *How Do Seeds Travel?*
- *The Tiny Seed* by Eric Carle
- *Oh Say Can You Seed?*
- *A Seed Grows*

The Magic School Bus Gets Planted video

Websites:

- The Teacher's Guide lesson plans/activities <http://www.theteachersguide.com/plantsflowers.htm>
- The Great Plant Escape <http://urbanext.illinois.edu/gpe/>
- Pete's PowerPoint Station <http://science.pppst.com/index.html> (plant parts-Cape school or Hawkins, Seeds Grow!,
- Parts of the plant/ what do plants need <http://www.naturegrid.org.uk/plant/index.html>
- Life cycle of plant-
- <http://www.ngfl-cymru.org.uk/vtc/Phase2delivery/Wales/Science/Keystage2/Lifeprocessesan/Lifecycles/Introduction/activity1pop.htm>
- Plant lifecycle- <http://www.graves.k12.ky.us/powerpoints/elementary/sym1cherry.ppt>
- What is soil? <http://www.blm.gov/nstc/soil/Kids/index.html>

Education City:

- Granny's Garden- basic needs of plants
- Soil
- Seed Feed- germination
- Flower Power- plant parts and surrounding environmental effects