

Unit Title: Plant Life Cycles

Grade Level: (example: 9, 10, 11, 12 or 7-8) Grade 2

Subject Area: (example: Science, Physics; English, Short Stories) : Science

Duration/Length/Number of class periods: (example: 5 class periods) 2-3 weeks

Description: Students engage in inquiry, making observations of plants at various stages. Timelines and nonfiction text features are explored as students record their learning. Students experiment with different plant life variables, predict outcomes, and then compare the life of a seed/plant to the their own life as a culminating assessment..

Established Goals (National, State, Local): State

2.4.1.1.1 Interdependence Among Living Systems: Living things are diverse with many different observable characteristics.

2.4.2.1.1 Evolution in Living Systems: Natural systems have many components that interact to maintain the system

What Enduring Understandings are desired?

Describe and sort plants into groups in many ways, according to their physical characteristics and behaviors.

Recognize that plants need space, water, nutrients and air and that they fulfill these needs in different ways.

What Essential Questions will be considered?

How can plants be so alike; yet be so different?

How do plants grow and produce new plants?

How do plants survive in different conditions?

Students will know / be able to:

Sort and describe plants into groups in many ways according to their physical characteristics and behaviors (By the way they look, where they live and by the things they do).

Identify what plants need to live. This means to tell someone that plants need space, water, nutrients, and air to live.

Describe the different ways plants fulfill their needs. This means to explain the different ways plants get space, water, nutrients and air.

Description <i>Units must include at least one of each formative, summative, introductory activity and learning activity. Check the appropriate box; one per row.</i>	Formative	Summative	Introductory Activity	Learning Activity	Student Technology Used	Teacher Technology Used	ISTE Standards
Wonder Wander: Plant Hunt Outdoors. Foss Investigation 1: part 4. Work in pairs to collect leaf samples from a variety of plants. The class sorts the collected leaves and items from plants. Students generate a list of questions they have about plants. Assessing is students can ask questions related to a topic. Observations of students if they can sort and classify	X						
Algorithm introduction and pre assess Code.org unplugged lesson page 71	X						5a
Optional lesson based on formative assessment from Code.org lesson: Foss Investigation 1: Part 1: What happens to seeds in moist soil? Embedded assessment as students predict outcomes and make observations in their science journal. Students will record photos on our class story or individual portfolios on ClassDOJO.	X						
Foss investigation 2: 3 parts: *Rooting Stem cuttings *Nodes of a potato *Keeping cuttings alive	X						
Germination of Seeds in different conditions: dark and light: bean investigation	X						
Relating Life cycle: students choose a plant, and create a timeline to match their life cycle. They will share the timelines on their digital portfolio: ClassDOJO		X					6a, 6b

Materials, tools and resources: Lesson explanations, resources and photo examples: https://docs.google.com/document/d/1zUvQwExGYFoCCAnk3yM0W19U10MDiYqA6c-SEkJYyCl/edit?usp=sharing
Unit Plan Author (name, school and optional email address or hyperlink to teacher's web page) Mary Schroepfer, Lincoln Elementary, Owatonna
Additional credit given to Code.org, Foss Plants and Animals: Delta Education