

GENERATIONGENIUS Always ouestion, always wonder.

LESSON PLAN

Link to Video

PLANTS NEED WATER AND LIGHT GRADES K-2

SUMMARY

Students will identify what plants need to grow. Duration: 1 hour.



K-LS1-1. Use observations to describe patterns of what plants and animals need to survive.

Science & Engineering Practices	Connections to Classroom Activity
 Analyzing and Interpreting Data Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording and sharing observations. Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (K-LS1-1) 	 Students will observe plants around them and in a video to conclude that all plants need water and light to grow.
Disciplinary Core Ideas	Connections to Classroom Activity

Crosscutting Concepts

Connections to Classroom Activity

Patterns

Patterns in the natural and human designed world can be observed and used as evidence. (K-LS1-1)

 Through observing the growth of many seeds, students will see a pattern that they all need water and light.

ENGAGE

Show students different plants (these can be real plants, if available, or photographs). This can also be done through a nature walk outside. Discuss similarities and differences between the plants. Ask students about the types of plants they might have at home. Next, show students a seed. Ask students how they think a tiny little seed turns into a plant. Tell students that today, they are going to learn what a seed needs to become a plant.

EXPLORE

EXAMPLE MATERIALS

- Plants and/or plant photographs
- Seeds (any kind, 1 per student)
- Magnifying glasses (1 per student)
- Construction paper (1 page per student)
- Coloring supplies (markers, crayons, colored pencils, etc.)

DIY Activity (per group)

- Pack of cress seeds (a fast-growing, edible herb)
- Small jar or cup
- Pack of cotton balls
- Spray bottle with water
- Pack of markers, googly eyes, etc.

Distribute a seed to each student. Allow them to take a few minutes to examine their seed with a magnifying glass. As a class, brainstorm ideas on how to help their seed grow into a healthy plant. Students may talk with partners or a small group prior to sharing ideas. Write down student-generated ideas on the board. Tell students they are going to watch a video to help them learn how to make seeds grow.

EXPLAIN

WATCH THE GENERATION GENIUS PLANTS NEED WATER AND LIGHT VIDEO AS A GROUP

Facilitate a conversation using the Discussion Questions.

After the video, explain that all plants need both sunlight and water to grow. Different types of plants may need different amounts of water and sunlight, but they all need light and water to grow. Most plants grow best in soil, but some can grow without soil.

Explain to students that they are going to create a diagram to show how a seed grows into a plant. Distribute construction paper to each student. Holding the paper horizontally, show students how to divide their paper into three equal sections. In the first section, students should draw a picture of a seed. In the next section, students should draw the planted seed receiving water and sunlight. In the final section, students should draw the fully-grown plant. Students may number and label the diagram.



Students can play the online Kahoot! quiz game located below the video which provides downloadable scores at the end of the quiz game. Alternatively, you can use the paper quiz or the exit ticket questions. All these resources are located below the video in the Assessment section.



More advanced students can grow their own seeds in various conditions such as trying to grow a seed in the dark or to grow it with no water. Also, the full plant life cycle may be studied to further their understanding of plant growth.

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