

Focus on: Planting Seeds

This lesson is meant to support the unit on Plants on Earth. For this lesson, students will plant seeds in the garden. Check with your garden coordinator to see when or where it may be possible for your class to plant seeds.

Clarifying Objectives:

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.

Key Vocabulary:

Definitions can be found at <http://learnersdictionary.com>

- Survive
- Environment /Environmental
- Conditions
- Summarize
- Stages
- Life Cycle
- Seed Plants

Focus Question(s):

How does the germination of one plant compare to the germination of another?

Materials:

- School Garden
- Garden Gloves to wear while working in the garden
- Science Notebooks
- Seeds (Brassica or other – A comparison can be made to the classroom plants either way.)
- Rulers
- Calendar Grid

Activities:

1. For this lesson, students will plant seeds in the school garden to compare the growth with those that were planted in the classroom.
2. Observe the seeds for the garden. Compare the similarities and differences with the seeds that were planted in the classroom.
3. Have students research to find out how deep and how far apart the seeds should be planted.
4. In the garden, students should measure to mark where to plant the seeds. They should also measure to see how deep the seeds should be planted.
5. Plant the seeds.
6. Discuss what the seeds will need in order to grow.
7. Discuss how the needs will be met in the garden. (Irrigation system, rain, sunshine, etc.)
8. Students should record what they did in their science

Guiding Questions:

- How are the seeds the same as the ones that were planted in the classroom? How are they different?
- How far apart should the seeds be planted? Why do you think that is important?
- What if the seeds were planted too close together?
- How deep should the seeds be planted? Why do you think that is important?
- What if the seeds were planted too deep? What would happen?
- What does the seed need in order to germinate?
- What does germinate mean?
- How will the seeds/plants in the garden have their needs met? How does that compare to how we took care of the

<p>notebooks and make note of the needs the seeds have in order to grow.</p> <p>9. Check back to see when the seeds germinate. (The seed package should let you know the approximate time it will take until germination or you can research it.) You should check back prior to the time so you are sure not to miss the germination as the day can vary.</p> <p>10. Have students record their findings on each visit to the garden. They should also note the rain and sun that occurred during the time they were waiting on germination. (A calendar is a helpful recording device. Weather and germination observations can be easily recorded in each block.)</p>	<p>plants in our classroom?</p> <ul style="list-style-type: none"> - What if it doesn't rain? What is the plan for taking care of the seeds in the garden? - How long did it take the seeds in the garden to germinate? - How is that the same or different from the plants in the classroom? What is the reason for the similarities or differences? - Did it rain while we were waiting for the seeds to germinate? How did that impact the germination? - Was it sunny while were waiting for the seeds to germinate? How did that impact the germination? - Did humans have to intervene to care for the plants? What was done?
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