Seasons and Light

Grade Level: 1st

Season: Spring

Larger IGS Unit: Garden, Seeds

Essential Question: What are seasons? How do seasons affect us? How do seasons affect plants? What kinds of tools can we use to help plants grow?

Objective: Students will understand the role of sunlight in the change of seasons. Students will recognize the effects of light on plants. Students will be able to identify different types of plants and their different needs.

Materials:
The Year at Maple Hill Farm
"Seasons" worksheet (included in this folder)
Globe
Winter, Summer, Spring, Fall notecards

Introduction:
Review what season we are in, and some of the things we notice that are different during this season.
Read from the book, The Year at Maple Hill Farm, to give students a visual of the different seasons.

Activity:
Break students up into 4 groups: Spring, Summer, Fall, Winter
Give students their “Seasons” worksheet. First, they can write words they think best describe that season. Then ask students to draw a picture of something that best illustrates that season. Finally, ask students to draw a picture of a plant during that season.
Bring students together at the circle to share their season with the class.
Ask students how they think the light changes in each season. Explain that the reason each of the seasons is so different on Martha’s Vineyard is because our view of the sun changes a lot in each season.
Act out the earth’s tilt, and its orbit around the sun: ask students to stand around you in a circle. Place the “Spring” “Summer” “Fall” and “Winter” cards around you at four equidistant spots. Students stand with their season group. Pass the globe from student to student around the circle to see how it’s view of the sun changes as it moves around its orbit.
Give examples of places in the world where there are not any big changes in the seasons (regions near the Equator). Give examples of places in the world where there are even bigger changes in each season (regions close to Antarctica and the
Arctic Circle).
Write down the (average) number of hours of sunlight per season on the board: 9, 12, 15, 12. Ask students to figure out, in their group, how many hours they might have in their season. Students share their ideas.
Describe the special times of year when people celebrate the changes in sunlight: Summer Solstice, Winter Solstice, Spring Equinox, Fall Equinox.
Ask students how they think the number of hours of sunlight might affect plants.

Wrap up/ Assessment:
Students complete the “Seasons” worksheet

Extensions:
How can we find out how the number of hours of sunlight affects plants? Let’s do an experiment! “Seasons and Light Experiment” (next lesson in the curriculum toolkit)