

Walla Walla Public School Garden Lesson

Title: 2nd Grade- Spring Flower Seed Planting

Standards addressed: EARL2-3LS1A Plant life cycles; EARL2-3 LS2A Ecosystems, EARL2-3 LS2D Humans impact ecosystems in both positive and negative ways.

Unit connections: Science: Butterflies, Language Arts: From Seed to Plant (NF), The Secret Life of Trees (NF), Watermelon Day (F), Pumpkin Fiesta (F) Math: Measurement

Description: Students learn about pollination and pollinators and then plant flower seeds either in planting cups to be transferred to the garden during a follow up activity, OR directly into the garden depending on the time of year/weather.

Date: 2nd week in April, after spring break

Objective:

Students list what organisms need to live. Students understand pollination and the reason for a flower. Students discuss ways some organisms help other organisms. Students plant flower seeds in small containers to be transferred to the garden (or plant them directly in the garden depending on the time of year you do this activity).

Time Required:

PreGarden Time: 90 minutes in class time

Garden Time: After plants have their first true leaves, 30 minutes (3x10minutes).

Materials:

Supplies: chart paper for KL (A what we KNOW and want to LEARN) chart and for the flower diagram, planting stations with soil and seed trays w/ pots (small containers) and the seeds of different easy to grow flowers (sunflowers, cosmos, marigold, zinnia, nasturtium), and newspaper to cover the tables. Pollination PowerPoint. Drawing paper and colored, pencils, markers, or crayons. If you are starting the seeds indoors, you will need an area for the pots to grow, possibly a grow light or an area in a window sill.

Preparation:

Post chart paper on wall in meeting area. Purchase seeds to be planted. Either purchase or prepare small planting containers--you could ask teachers to have students save their milk cartons and rinse them out the day before (one per student) and then cut the tops off or open the containers up as part of your preparation. Work with the teacher to get the Pollination PowerPoint ready to show the class. Set up a follow up lesson for planting the starts 2-3 weeks later.

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Class Discussion/Action:

1. Gather class at the rug.
2. Label three sections at the top of the KL chart: What we Know. What we Learned. Write the title: FLOWERS across the top. Have students Turn-n-Talk with an elbow partner about all of the scientific things they already know about flowers. Have a few partners share out their ideas and record on the K of the chart.
3. Students may bring up bees, butterflies, pollination etc. If so, let the class know that is what we will be investigating today. If it isn't already on the chart, write Pollination on the board or on the W part of the chart. Ask the class to put their thumbs up if they have heard this word. Under the word Pollination, write an H= ___ and record how many students have heard the word. Then write an NH= ___ and ask the students to put their thumbs up if they have NOT Heard the word Pollination, record that number. Have students volunteer to share any information that they think they know about Pollination right now. Draw a line (called a Line of Learning) under the K information already on the K section of the chart and add any information this conversation prompts.
4. Talk about the role of beneficial organisms/show the power point presentation to assist with this discussion. Birds, butterflies, bees and bugs help pollinate. Good bugs eat pests like ladybugs that eat aphids. Wild native areas in the garden help maintain a large number of different plants that have many different good qualities.
5. Let the students know that today they will get to plant habitats and food for these beneficial organisms.
6. Draw a flower and label the basic parts as you talk about what plants need to grow (air, light, water, soil).
7. Take students through the process of loading soil into containers, planting flower seeds into small containers, placing in the tray that captures the excess water and watering. Place in grow light area or on a south facing windowsill. If you are planting in small groups, the other students can draw their own flower diagram (and can add pollinators as details).
8. If separating into two groups, one group hears the book "The Reason for a Flower" by Ruth Heller, while the other group plants.
9. When plants have their true leaves, return to class and take students out to garden in small groups to plant flowers, in designated areas around the garden. Extra plants can be taken home as a Mother's Day gift.

Wrap Up:

Gather students at the rug after planting the seeds. Return to the KL FLOWERS chart. Review the K section with the class. Ask them to Turn-n-Talk with an elbow partner about what else they know now about flowers, what they learned today. Record and discuss their responses as you add them to the L section of the chart.

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Vocabulary Words:

pollinate | 'pälə,nāt |

verb [with obj.]

convey pollen to or deposit pollen on (a stigma, ovule, flower, or plant) and so allow fertilization.

DERIVATIVES

pollination | ,pälə'nāSHən | noun,

pollinator | -,nātər | noun