A Garden of Opposites

Adapted from: Life Lab “Six of One, Half Dozen of the Other” from The Growing Classroom

Overview: Students find and classify contrasting objects in the garden, using multiple senses.

Subject area: Science

Grade level: 1st-2nd

Next Generation Science Standards:
2-PS1. Matter and its Interaction
- 2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

English Language Acquisition Common Core Standards:
- 1.L.5 ELA. With guidance and support from adults, demonstrate understanding of relationships and nuances in word meanings.
- 1.L.5.a. ELA. Sort words into categories to gain a sense of the concepts the categories represent.
- 1.L.5.c ELA. Identify real-life connections between words and their use.

Objectives: Students will be able to identify and classify objects in the garden.

Prep time: 30 minutes

Lesson time: 40 minutes

Materials needed:
- One egg carton per group of three students
- Permanent markers and/or sticky notes to write vocabulary words

Space needed: School Garden

Staff needed: 1

Preparation steps:
On the bottom of each egg carton, write two opposite words (antonyms) describing the quality of a garden object.

Examples (in English and Spanish):
- Wet/dry = mojado/seco
- Rough/smooth = áspero/liso
- Dark/light = oscuro/luminoso
- Dull/colorful = mate/ de colores vivos
- Scented/unscented = huele/ no huele
- Heavy/light = pesado/ligero

Healthy Youth Program – Linus Pauling Institute • lpi.oregonstate.edu/healthyyouth
Soft/Hard = suave/duro
Sweet smell/strong smell = olor dulce/olor fuerte
To discourage unsupervised tasting, avoid opposites that refer to taste.

Presentation steps:
1. Discussion with the whole class: What is an opposite? What are the five senses? What senses can we use to explore opposites in the garden? In this activity, you will be searching for objects that have a specific quality, and those that have the opposite quality. What are some examples of opposites?
2. Divide the class into groups of three. Tell the class that each group will get a special collecting container (egg carton) in which to collect 12 items. Each group will have a different set of objects that they will be collecting.
3. Demonstrate how the opposites should be placed in the carton, with six of each category in a long row. On the bottom of the carton are secret words that tell what category of objects to collect.
4. Distribute the cartons to each group and give the students time to read and comprehend their words.
5. Remind students to handle everything gently and to take only small specimens. Each one should fit in the egg compartment!
6. Students should spend approximately 20 minutes collecting.
7. Gather the entire class together again. Each group will present the contents of their egg cartons without revealing to the other students what the words are on the bottom. See if the students can guess the opposite words based on what the group collected.

Conclusion: Ask students which items felt the scratchiest, looked the most colorful, had the strongest scent, etc.? How did they find objects for each category of opposite words? Ask each group what was their best collected example.