

Pre-visit Activity:

P.L.A.N.T.S. Needs

Objective

Students will list basic plant needs and demonstrate the importance of space when planting seeds and transplants.

Next Generation Sunshine State Benchmarks: SC.K.L.14.3, SC.1.N.1.1, SC.1.E.5.4, SC.1.L.17.1, LA.K.1.6.1, LA.K.1.6.3, LA.K.1.6.5, LA.K.5.2.1, LA.1.1.6.1, LA.1.1.6.5, LA.1.5.2.1, LA.1.5.2.2, SS.K.A.3.1, SS.1.A.3.1, MA.K.G.2.1, MA.K.G.3.1, MA.1.G.5.2, PE.K.R.2.2, PE.1.R.1.3

Vocabulary

oxygen	habitat
carbon dioxide	nutrients

Materials

Poster board or white board
Outdoor area (optional)

Procedure

1. Ask the students what people need to live. List the five basic needs that all people share: food, water, air, shelter and clothing on the board.
2. Ask a student to circle the items that plants must have to live. Ask if they know of anything plants need that people do not.
3. On the left side of the board, write the word PLANTS vertically, and tell the students that the clues to everything a plant needs are in that word.
4. Once the list is complete, it will read: P-place; L-light, A-air; N-nutrients; T-thirst; S-soil. Challenge the students to recall the list of plant needs without looking at the board.
5. Have the students tell you what they like about their houses. Ask them what makes a home a comfortable place to live. With the word PLANTS still on the board, ask the students what kind of home a plant would want to live in, the plant's habitat.
6. Take the students outside and stand in the shade of a tree or building. Ask them if they think this would be a good spot for the plant to grow. If possible, take them to a place near a ditch or where water stands or an area with little soil and ask them what they think about the location. Walk to a sunny area and also ask if their plant would like to grow there.

7. Begin to introduce the concept of space and tell the students that plants must have enough space to ensure that they are getting everything they need. If plants are planted too close, they might not all get enough light, water or nutrients.
8. This activity is best when done outside, but will work inside as well. Ask four students to be wildflowers in the garden. Have them sit on the ground next to one another in a square and stretch out their arms and fingers as if they are growing up to the sun.
9. Ask six additional students to be tall sunflowers and stand closely around the wildflower plants so they are crowded. Have the sunflowers stretch their arms up and grow, too. The wildflowers should be feeling crowded at this point.
10. Ask the wildflowers if they feel they are getting enough light. Roots from the sunflowers will probably grow all around the wildflowers, soaking up water.
11. Ask the rest of the class to suggest ways to rearrange the sunflowers and wildflowers so that they have enough space to grow, but not so much space that weeds take over in between.
12. Explain to the students that when planting a garden, it is important to know how big a plant is going to be when it matures. Also explain how plants have adapted different ways of arranging themselves in the wild and growing in the right place where they will receive all of the things that they need to grow.

Extension-Establish Your Own School Garden!

If you don't already have a school garden, this is a great time to create one! A school garden may start out small but can be expanded each school year. There are many different types of gardens, vegetable gardens, butterfly gardens, or even salsa and pizza gardens. You might want to start with a container garden in your classroom. Plants such as beans, peanuts, and some herbs can be grown easily indoors, and may be used for other lessons and science experiments. For more information and resources visit www.fairchildgarden.org/education or www.kidsgardening.org. Happy Gardening!

Adapted from Wildlife Gardener, A Junior Master Gardener Golden Ray Series

