



DALLAS ARBORETUM
Education

Garden STEM at Home *Structure & Function Walk*



WE GROW MINDS, TOO.

STRUCTURE AND FUNCTION WALK



OBJECTIVE:

STUDENTS WILL OBSERVE PLANT PARTS FOUND IN THEIR HOME, YARD/SCHOOLYARD AND LANDSCAPING AROUND A BUILDING TO INVESTIGATE WHICH PLANT PARTS ARE MOST COMMONLY FOUND IN EACH LOCATION.

BACKGROUND

Plants, like all living things, have a variety of structures with specific functions to help them survive. A stem holds a plant upright towards sunlight. Roots allow nutrients from the soil to enter the plant.

In this activity, students will investigate some of the most common plants parts - roots, leaves, stems, flowers, fruit and seeds in a variety of locations to understand how humans' use of plants varies.

INSTRUCTIONS

1. Make a copy of the chart below - or create your own in a notebook or journal.
2. In a small group of family, decide upon three locations that you will investigate from the following: pantry and spice cabinet, refrigerator, grocery store, schoolyard, neighborhood park, backyard, home garden, etc.
3. Explore each location, recording as many examples of each plant part as you can identify. If you encounter something like a fruit that also contains seeds, you may mark it in both columns.
4. Compare the list for each location and discuss as a group or family.
5. Possible questions for discussion: Which plant part is most common in each location? Why do you think that it is? Where are you most likely to find complete plants? Only parts of plants? Are there locations where certain plant parts, like fruit, are not desirable?

ADDITIONAL RESOURCES

Plant Parts and Functions lesson for younger students:

https://www.doe.virginia.gov/testing/sol/standards_docs/science/2010/lesson_plans/grade1/life_processes/sess_1-4b.pdf

PBS Plant Structure and Function for middle aged students:

https://kera.pbslearningmedia.org/resource/tdc02.sci.life.stru.lp_plants/plant-structure-and-function/

Ohio State University Plant Structure and Function lessons:

<https://beyondpenguins.ehe.osu.edu/issue/polar-plants/hands-on-lessons-and-activities-about-plants>

LOCATION	ROOTS	LEAVES	STEMS	FRUIT	FLOWERS	SEEDS



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