



DALLAS ARBORETUM
Education

Garden STEAM at Home
Imagined Plants: Connections



WE GROW MINDS, TOO.

IMAGINED PLANTS: CONNECTIONS



OBJECTIVE:

STUDENTS WILL DEMONSTRATE THEIR KNOWLEDGE OF PLANT ADAPTATIONS BY CREATING A TWO- OR THREE-DIMENSIONAL IMAGINED PLANT ART PIECE.

SOURCE

DickBlick.com

BACKGROUND

Dick Blick's Imagined Plants lesson plan, linked below, asks students to create an imagined plant based on Dr. Seuss' classic book, *The Lorax*. Their step-by-step plan asks students to consider each part of the plant (stem, shoot, trunk, leaves, seeds, flowers, cones, roots, and spores). It even asks them to create an infographic to communicate plant information.

Educators and parents can readily increase the rigor of this activity. See our suggestions below!

Note: This is an excellent activity to guide discussion on student misconceptions around adaptation. For example, many students do not understand that adaptations occur over very long periods of time. Animals adjusting to environmental shifts are already adapted behavioral responses, not adapting.

TAKE IT FURTHER

1. Upon creating a plant tag, label or stake, include the specific adaptations (structures/functions) for your plant.
2. Create an imagined plant that would live in a specific habitat discussed in school. What structures are essential to its survival? Could an additional structure help it be even more successful?
3. Begin with an existing plant and determine what adaptations it would need to survive in a different habitat. Create this new plant.
4. Create an entire garden of imagined plants fit to survive in specific habitats. Do a gallery walk asking students to record structures/functions that are present.
5. Create a model of an existing plant. Then, brainstorm a list of human-generated environmental impacts (flooding, drought, fire, etc.). Choose one and modify your model to help it survive in the new environment.

DIGITAL RESOURCES

Dick Blick Imagined Plants Lesson Plan:

https://assets.ctfassets.net/f1f1kihjmjtrp/4w1ptz9PnF48SZdE3lXsHP/759298225406abc51938764b01c0e8f7/Imagined_Plants.pdf

Project WILD Adaptation Artistry STEM Resources:

<https://www.fishwildlife.org/projectwild/step-stem-and-wild-work/adaptation-artistry>