Game 1: Plant Defense Pictionary

This game will encourage students to create plants that adapt to various stressors such as drought, herbivory or damage from being crushed. It will give students the ability to creatively think about adaptations, coping with stress and explaining their ideas.

Materials

Either paper or space on a chalkboard (or whiteboard)
Something to write with (pen, pencil, crayons, markers, colored pencils)
Note cards (to write the stresses, seasons, plant parts on)
Attached game pieces (rose, chestnut, leaf)

Set up

Students can work individually, as pairs, or in small groups. Each student (or pair or group) is given something to draw on, whether it’s paper or space on a chalkboard. The teacher will draw one card and read it aloud to the class. If the card is a “Stress” card, students will have three minutes to draw and explain how their plant will cope with that stress. The two best plants will be given game pieces. If a “Plant part” card or a “Deciduous trees during seasons” card is drawn, each student will have one minute to draw. All correct students will be given a game piece. The first student to 10 game pieces wins! **NOTE:** When it comes to “Stress” cards, although there are “right” answers, creative answers are also acceptable!

Alterations

- The teacher can draw two or more “Stress” cards to challenge students to think creatively. Remember, plants can use more than one defensive strategy to survive!
- Cards can be additionally added as new plant science (or ecology) concepts are learned in class. For example, if you have a school garden, you could have a “name a plant whose leaves we consume” card. Or, “Name a native plant” “Name a plant that has red flowers” “Name a plant producing nuts”

Explanations of Stress Cards

**Herbivory:** Students can use thorns, thick skin, hairy leaves, smells or oils to ward off herbivores

**Drought:** Students can use thick skin, smaller plants, deeper roots to stay hydrated
Deer: Students can use anything for herbivory AND plants taller than deer
Crushing: Students can use moving leaves (or stems or branches), thorns, oils, plants that grow on trees (out of the way of being crushed Ex: orchids)
Heat: Students can use thick skin, smaller plants
Insects: Students can use oils, smells or thick skin
Freezing: Students can use hibernating plants, plants that retract into the soil (alfalfa), plants that create their own heat (skunk cabbage), thick bark, etc.

**Seasons**

Fall: Leaves turn shades of orange, yellow, red; Leaves fall
Winter: Tree hibernates
Spring: Tree awakens, buds bloom, catkins (Black walnuts, willows) begin flowering, leaves emerge
Summer: Tree may also bloom (magnolia), tree grows

**Plant Parts**

Root
Stem
Leaves
Branches
Flowers

**Game Pieces**