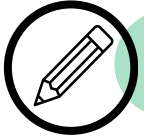


PLANT ADAPTATIONS



MATCH

Draw a line to match the plant, dispersal mechanism, and element that spreads seeds. Head out on the trails in search for seeds and try to identify how each plant disperses them.

Seed

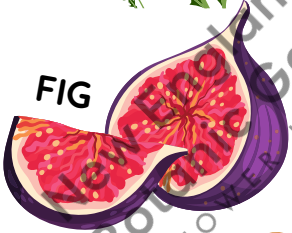
COCONUT



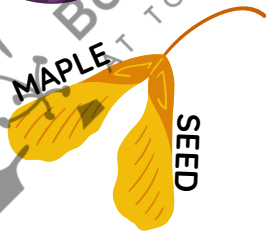
DANDELION



FIG



MAPLE



SEED

Dispersal Adaptation

This seed has wings that allow it to twirl and glide to the ground below the tree.

This seed has a layer of fibers to make it light weight and able to float.

This seed is surrounded by a delicious fleshy fruit.

This seed has hair/fuzz which allows it to fly.

Element

WIND



GRAVITY



WATER



ANIMAL



WRITE

Fill in the blank with the correct word to complete each sentence. Use the words listed below.

Sexual

Asexual

Budding

- _____ is a reproductive process that happens when the plant creates an outgrowth that eventually separates and grows on its own. Succulents reproduce this way.
- _____ reproduction is when male (pollen) and female (ovule) parts combine to create gametes.
- _____ reproduction happens when a plant creates another genetically identical plant.



DISCUSS

Split into small groups to discuss these questions.

What environmental characteristics are needed for each seed dispersal adaptation to improve reproduction possibility?

What would be an advantage to reproducing asexually or sexually in an environment?

GARDEN RELATIONSHIPS



WRITE

Fill in the blank of the missing words from the word bank in the middle of the page.

_____ is the killing of one organism by another for food.

Commensalism is the relationship between two organisms where one organism benefits while the other remains neutral, not benefitting or harmed.

_____ is the relationship between two organisms when one organism is harmed at the expense of the other organism.

Mutualism is the relationship between two organisms where both organisms benefit.

_____ is the interaction between organisms for a common resources like food, water, or space that is in limited supply.

WORD BANK

Mutualism

Parasitism

Commensalism

Predation

Competition



FIND

Use the word bank above to write relationship shown in the pictures. As you explore the garden, see how many you can check off in the little box beside the picture.











TROPHIC LEVELS



COMPLETE

Refer to the food web or use your knowledge to fill in the trophic level pyramid. Draw or write one or more organisms that belong in each category. Discuss the information and energy transfer with your group and answer some questions at the bottom of the page.

**Tertiary/Apex
Consumer**

0.1%

**Secondary
Consumer**

1%

**Primary
Consumer**

10%

Producer

100%

Relative Amount of Available Energy

1. Why does the amount of species decrease as you work your way up the pyramid?
2. Why is the low amount of tertiary and apex predators important?
3. Take a look at the energy transfer amounts. Why wouldn't all the energy and nutrients transfer to each level of consumer?