

DISCOVER
our AMAZING
WORLD
CLIL READERS

CARNIVOROUS PLANTS

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Unusual Adaptations

The plant kingdom is a massive group of organisms that includes trees, flowers, shrubs, grasses, vegetables, seaweeds, and more. There are approximately 300,000 species. Plants usually grow in soil and live by creating energy from sunlight. They grow in almost every land-based environment and are important parts of almost every ecosystem.

Like all organisms, plants evolve to take best advantage of their habitat. They do this in a variety of ways, each of which reflects the widely-differing conditions in which they live. In some cases, it's a simple change of shape or size. But in other, more extreme situations, plants have had to develop in very unusual ways.

Carnivorous plants use different types of traps to catch prey, including snap traps, flypaper traps, pitfall traps, and suction traps.



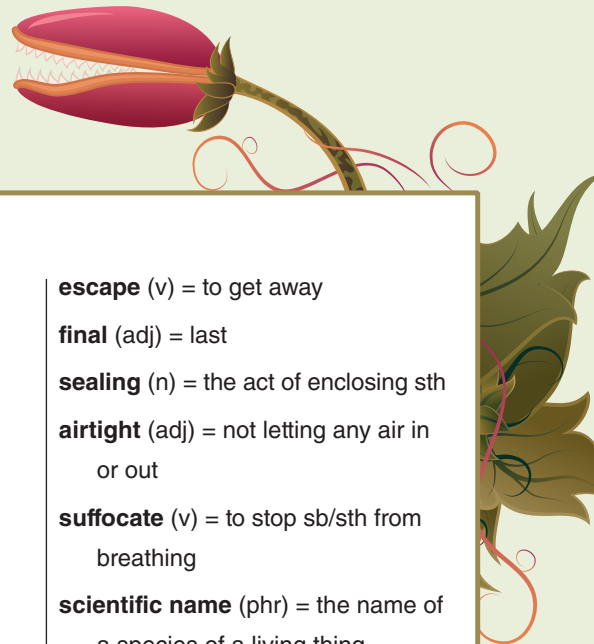
Plants adapt to environments in many ways. These adaptations make certain plants unique and contribute to the variety of species in the plant kingdom. Many plants grow in areas where the soil does not provide enough nutrients. This forces them to find other ways of getting food. One very strange solution to this problem has led to carnivorous plants – plants that eat animals! Interestingly, different types of these plants use different methods to catch their prey. Examples of carnivorous plants include Venus flytraps, pitcher plants, sundews, butterworts and bladderworts.



There are 400 known species of carnivorous plants.



Evolution of a Snap Trap



Word Bank

(pp. 8-9)

snap trap (phr) = a device that catches and holds prey by closing quickly

steel (adj) = a metal of silver color

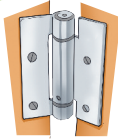
bear trap (n) = a trap that catches big mammals like bears

split into (phr v) = to divide into

lobe (n) =



hinge (n) =



trigger hair (phr) = a fine thread that can sense movement to set off a trap

snap shut (phr) = to suddenly close

scientist (n) = researcher

ancient (adj) = very old

ancestor (n) = a family member that lived a long time ago

tentacle (n) = (of plants) a sensitive hair

primitive (adj) = not very developed or evolved

substance (n) = the material that sth is made of

efficient (adj) = effective

break free (phr) = to get away

survive (v) = to continue to live

gene (n) = an inherited trait

selective (adj) = picky

specific (adj) = particular

favor (v) = to prefer

avored (adj) = preferred

in addition (phr) = also

debris (n) = bits of rock, soil, dead plants

feature (n) = characteristic

sensory (adj) = able to sense sth

capture (n) = holding by force

break down (phr v) = to divide into pieces

movement (n) = motion

blink (v) = to wink

tightening (adj) = squeezing

phase (n) = a stage or period of sth

cilia (n) = projecting hair on the edges of some plants' leaves

escape (v) = to get away

final (adj) = last

sealing (n) = the act of enclosing sth

airtight (adj) = not letting any air in or out

suffocate (v) = to stop sb/sth from breathing

scientific name (phr) = the name of a species of a living thing

mammal (n) = a warm-blooded animal that gives birth to babies

beetle (n) =



ant (n) =



grasshopper (n) =



caterpillar (n) =



eat one's way out of (phr) = to destroy the surface that keeps one from escaping by eating

Pre-Reading activities

1 a) Choose the option that you think is correct.

- The Venus's flytrap leaves have two
A teeth **B** lobes **C** tentacles **D** stems
- Some insects their way out of the traps.
A jump **B** eat **C** climb **D** fight
- Dionaea muscipula* is the of the Venus flytrap.
A phase **B** scientific name **C** ancestor **D** child

b) Listen, read, and check if your answers were correct.

While-Reading activities

2 Read the text and choose the correct option from A, B, C, or D.

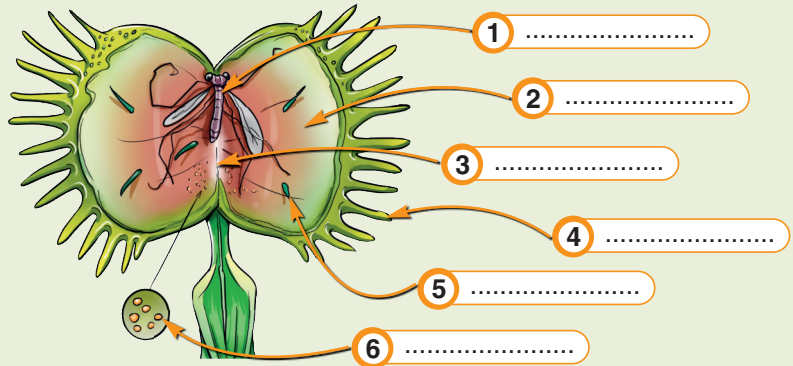
- Some primitive carnivorous plants had
 - large leaves.
 - steel bar traps.
 - sticky tentacles.
 - long hairs.
- Plants with the fastest moving tentacles passed on their genes to
 - some animals.
 - all of the plant kingdom.
 - future generations of carnivorous plants.
 - previous generations.
- A flytrap's capture process has only

A 30 steps.	C 0.3 steps.
B 3 steps.	D 9 steps.
- During the sealing phase,
 - the insect escapes.
 - the plant suffers.
 - the insect suffocates.
 - the plant suffocates.

3 Decide if the following sentences are **T (true)**, **F (false)**, or **DS (does not say)**.

- The Venus flytrap does not digest mammals.
- A flytrap's snap happens in about three seconds.
- The sealing phase takes about thirty minutes.
- The flytrap eats mainly land-based insects.
- The perfect size for its prey is one inch.

4 **SUBJECT-SPECIFIC VOCABULARY:** Label the diagram using: *cilia*, *hinge*, *nectar*, *lobe*, *trigger hair*, *prey*.



After-Reading activities

5 Which point A, B, C, or D best summarizes each paragraph?

Paragraph 1

- Venus flytraps' leaves are split in three lobes
- Venus flytraps have sticky tentacles
- Venus flytraps eat mainly mammals
- Venus flytraps work like bear traps

Paragraph 2

- They evolved to catch mammals
- They evolved to catch larger insects
- They evolved to catch bears
- They evolved to catch mice

Paragraph 3

- They evolved more features and became more selective
- Each trap can catch around four insects
- The fastest plants passed on their traits
- Venus flytraps cannot prevent their food from being stolen

Paragraph 4

- Small insects sometimes eat their way out of the traps
- Venus flytraps don't have cilia which act like a prison cell's bars
- There are three steps a flytrap follows to catch its prey
- Venus flytraps take 0.3 seconds to digest their prey

Paragraph 5


- The flytrap eats mostly non-flying insects
- The flytrap mainly eats mammals and flying insects
- The flytrap likes to eat insects that are larger than half an inch
- The flytrap does not eat beetles and ants

6 **ICT** Collect information about the Venus flytrap. Think about: description of the plant and its habitat. Prepare a PowerPoint presentation.




Review

Listening activities

1  Listen to a dialogue between two people. For questions 1-4 choose the correct answer A, B, C, or D.

- 1 What are the speakers mainly talking about?
 - A What movie Mary went to see at the cinema.
 - B Which carnivorous plants are the scariest.
 - C What movies have carnivorous plants in them.
 - D Which movie Mary and Annelie think is the scariest.
- 2 Mary and Annelie's project is about
 - A The different types of carnivorous plants in movies.
 - B How movies show carnivorous plants to people.
 - C How Venus flytraps are used in movies.
 - D Why carnivorous plants are used in movies.
- 3 Why does Mary mention *The Little Shop of Horrors*?
 - A Strange alien plants try to take over the world in it.
 - B A giant pitcher plant eats huge insects.
 - C Lots of different carnivorous plants are in it.
 - D A giant flytrap is an evil character in it.
- 4 Why does the man think that the Triffids were scary?
 - A They look like giant sundews that eat people.
 - B They have been found eating people for real.
 - C They are different from other carnivorous plants.
 - D They can eat other carnivorous plants.

2  Listen to the radio interview about carnivorous plants. For questions 1-4 choose the correct answer A, B, C, or D.

- 1 What has Michael Hunt NOT researched for the last 15 years?
 - A What carnivorous plants like to eat.
 - B Why there are meat eating plants in the world.
 - C How carnivorous plants catch their prey.
 - D What uses there are for carnivorous plants.
- 2 Why did Dr. Hunt change his research?
 - A Not many people had researched it before.
 - B He wanted to learn more about the uses of plants.
 - C More people were asking him about the uses of plants.
 - D He wanted to use the plants for a specific job.
- 3 How are carnivorous plants used in Scandinavian countries?
 - A To change what milk tastes like
 - B As toys for children
 - C To keep their hair shiny
 - D As a type of rope
- 4 What is the interview mainly about?
 - A The possible multiple uses of carnivorous plants.
 - B A new type of carnivorous plant discovered.
 - C Dr. Hunt's multiple researches.
 - D How different countries use carnivorous plants.



Amazing Facts

Did you know?

If you are growing any type of carnivorous plants, do not 1) them! They make their own food through photosynthesis when there is a lack of bugs.

Carnivorous plants are not 2) to humans when they touch them. It is actually the humans' behavior in certain cases that threatens the carnivorous plants' habitats.

The pitcher plant may serve as the bats' "bedroom". They take a nap without being harmed, leaving behind their 3) rich feces needed for the plant's food.



The waterwheel plant is a carnivorous plant that lives in water. It has snap traps 4) to those of the Venus flytrap.



The Newfoundland and Labrador province in Canada has the purple pitcher plant as its 5) emblem chosen by Queen Victoria more than a 100 years ago.

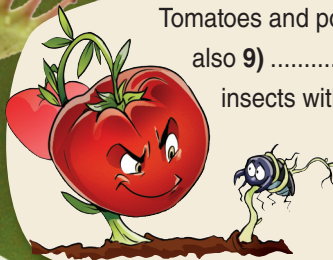
Venus flytraps can actually

6) without having a meal for 1-2 months.

The New Zealand tree nettle has sharp thorns which contain a 7) toxin, so just one scratch can kill a person.

The California pitcher plants will need to go 8) in winter for 3-6 months to get their "beauty sleep" especially if the weather is extremely cold.

Tomatoes and potatoes can also 9) insects with their sticky hairs on their leaves and stems.



1 a) Fill in the gaps to complete the sentences. Use: *survive, trap, insectivorous, floral, similar, feed, nitrogen, deadly, dangerous, dormant.*

b) Listen, and check if your answers were correct.

2 In groups collect more facts about weird plants. Prepare a Yes/No quiz.

Darwin's favorite 10) plant was the sundew, which he described explicitly in his book.

CARNIVOROUS PLANTS

Take a closer look at these stunning plants. They are a beautiful sight to our eyes, yet they are one of nature's predators.

They are harmless to people, but really dangerous to insects which land on their "deadly" traps.

Learn more about their trapping mechanisms, life cycle, and their nutritional habits through engaging pictures and interesting facts.

DIGI MATERIAL

cross-platform application

(iOS, Android, Windows, MacOSX)



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