Carnivorous Plants

Paragraph

1▶ Unlike the majority of plants that create their nourishment from sunlight, such as the flowering hyacinth or the leafy coleus or the garden-variety dandelion, a limited number of plants are able to enhance their diet by fortifying it with insects and other small animals to supplement the food that they have produced from sunlight. These carnivorous plants can be categorized in two ways. The first category includes those with stationary traps that lure their intended victims and then trap them on a sticky surface or drown them in a pool of fluid. The other category includes those with active traps—moving parts that ensnare prey.

2▶ Each of the two categories can be broken down into subcategories. The stationary, or passive, trap category can be further divided by the types of passive traps individual carnivorous species use to lure in their prey. Two of the common types of these traps are passive pitfall and lobster-pot traps. Similarly, the species in the active trap category can also be broken down further based on the type of active trap they utilize, such as a snap or a flypaper trap.

3▶ Passive trap plants that use pitfall traps typically have a rolled or cuplike leaf structure that funnels the prey, primarily insects, down toward the digestive tract. Pitfall traps make use of water and digestive enzymes to both move the insect into the digestive area and to break down the insect and absorb its nutrients. Because of their structure and the tendency toward growing in areas with a high accumulation of rainfall, plants with pitfall traps can be in danger of drowning themselves if their traps become too full of water. Consequently, many varieties have evolved to include some kind of drainage mechanism that releases excess water and fluids from the traps. Plants referred to as pitcher plants, due to their capacity for collecting water, are a common type of pitfall trap plant.

4▶ Like pitfall trap plants, plants that have lobster-pot trap systems may take advantage of water flowing into the trap. However, unlike their passive counterparts, lobster-pot trap plants are more dependent on tiny bristles on their leaves that conduct the prey inescapably toward the digestive area of the plant. While lobster-pot plants are composed of chambers that insects find easy to enter, these same insects find it nearly impossible to emerge safely. The bristles, tiny hairs growing inside of the chambers, are positioned in such a manner that the insects are forced to move away from the exit, in the direction of the plant's "stomach." Some lobster-pot plants, such as corkscrew plants, use water flowing through the chambers to push the insect more rapidly along the bristles into the stomach to be digested.

5▶ A well-known category of active plant traps is the snap traps; an easily recognized example is the Venus flytrap. The Venus flytrap, the only known terrestrial snap trap, consists of leaves that are double-lobed and hinged in the middle. When the prey lands on one of the leaves, it triggers a signal through bristles on the surface, which causes the leaf to "snap" shut and enclose the victim inside. Further struggle from the prey results in tighter closure of the leaf and secretion of digestion enzymes that absorb the nutrients from the insect directly through the leaf. Once the prey is completely absorbed, a process that can take weeks, the leaf unhinges and opens again.

6▶ Flypaper traps are another common variety of active trap plants. Though not all flypaper traps are active, the majority do fall under this category. In an active flypaper trap, the leaves have virtually microscopic tentacles[1] that are coated in a sticky substance. Once an insect lands on a sticky area of the plant, the tentacles adhere to the insect. Not only do the tentacles stick to the prey, but they almost immediately begin to grow in reaction to discovering an edible substance. In a relatively short time, the insect is covered by the plant and the digestion process commences. The butterwort is a common example of a flypaper trap. As soon as the prey attaches to a butterwort leaf, a process is triggered that causes the leaf to expand until it is able to roll over and entirely enclose its victim.

GLOSSARY

1 *tentacles*—long thin parts of (usually) sea creatures that are used to capture food

Directions: Select the appropriate phrases from the answer choices, and match them to the type of carnivorous plant to which they relate. TWO of the answer choices will not be used. **This question is worth 3 points** (3 points for 5 correct answers, 2 points for 4 correct answers, 1 point for 3 correct answers, and 0 points for 2, 1, or 0 correct answers).	
active traps	• •
passive traps	• • •

Answer Choices (choose 5 to complete the table):

(1) use a sticky substance to trap prey
(2) use water to aid in the entrapment of the insect
(3) direct the prey to move toward the digestive system
(4) use compartments lined with small hairs
(5) allow prey an easy chance to exit
(6) close shut when completely filled with liquid
(7) digest the prey directly on the leaf

Hemingway and Faulkner

Paragraph

1▶ Despite writing in the same time period, enduring similar personal struggles as well as extraordinary triumphs, and being recognized as two of the most influential writers of the twentieth century, Ernest Hemingway and William Faulkner differed significantly in their styles and philosophies of writing. Both men were honored with multiple literary prizes, including the Pulitzer and Nobel prizes, perhaps the most coveted awards for any writer. Additionally, both men gained international fame for writing, and notoriety for their personal lives and the injuries they endured. But they did not share their literary styles. Hemingway wrote with precision and a minimalism that was drastically different from Faulkner's long, complex, and descriptive prose.

Pay attention to the organization of ideas in the passage: chronological, cause/effect, comparison/contrast, problem/solution, and so on.

2▶ Ernest Hemingway was born shortly before the turn of the twentieth century, in a suburb of Chicago. He fought in World War I, where he met the first woman he intended to marry, a nurse with the Red Cross. Unfortunately, shortly after he returned to the States, the nurse wrote him and broke off the engagement. Hemingway began his writing career as a newspaper reporter. In 1920, Hemingway met and married his first wife, and they moved to Europe where Hemingway continued his work as a reporter while starting his writing career. Over the next few decades, Hemingway traveled the world, building his reputation as a novelist, while supporting himself at times with a variety of other types of writings, including a screenplay and play.

3▶ Hemingway wrote in a minimalist style. He concentrated purposely on framing his stories in sparse and simple language. Hemingway felt by telling one truth through simple action, dialogue, and "silence," he was in fact revealing a deeper truth that lay below the surface of the words he used. His style was concise, direct, and—literary critics would say—deceptively simple. Many believe this style was a result of his career as a reporter, where he learned to write factually and with clarity. However, beneath the simplicity, Hemingway's stories explore the themes of man's condition as much as by what is unsaid as what is said. Hemingway won the Pulitzer Prize in 1952, for his novel *The Old Man and the Sea*, a work he had completed in eight short weeks. He also achieved the honor of winning the Nobel Prize for Literature in 1954 for his contributions to the world of writing.

4▶ William Faulkner was also born at the end of the 1800s. Faulkner hoped to serve in the Army during World War I, though he was rejected for service because of his short stature. Faulkner's first love, Estelle Oldham, also married another man, leaving Faulkner heartbroken. Faulkner, like his literary contemporary, supported his dream of being a writer through various other means, including writing for journals, writing a play, and spending several years working on various screenplays.

5▶ In contrast to Hemingway's way of writing, Faulkner eschewed technique, once remarking that "The young writer would be a fool to follow a theory." His writing often derived from a "stream of consciousness" from which Faulkner allowed a variety of emotions and complexities to come into play in his stories. Faulkner's style was expressive. His emotionally charged and poetic stories contained lengthy, descriptive sentences that could at times be confusing to follow. Faulkner was the winner of two Pulitzer prizes, one in 1954 and one in 1962. He was also awarded the Nobel Prize in Literature in 1949.

6▶ Both authors experienced tragedy and pain in their lives. Both suffered an addiction to alcohol, and both suffered chronic pain from an accident. A few years before his death, while engaging in an activity he took up after he gained prosperity as a writer, Faulkner was seriously injured in a fall from a horse. Toward the end of Hemingway's life, he was injured in two consecutive plane crashes.

Directions: Select the appropriate phrases from the answer choices, and match them to the writer to which they relate. TWO of the answer choices will not be used. **This question is worth 3 points** (3 points for 5 correct answers, 2 points for 4 correct answers, 1 point for 3 correct answers, and 0 points for 2, 1, or 0 correct answers).	
Hemingway	• • •
Faulkner	• •

Answer Choices (choose 5 to complete the table):

(1) wrote complicated works filled with emotion
(2) lived a quiet and contented life
(3) wrote in a measured manner
(4) suffered severe injuries in plane accidents
(5) made his living only as a novelist
(6) wrote his Pulitzer-Prize winning novel in eight weeks
(7) won two Pulitzer Prizes

LIVEWORKSHEETS