

Citing Evidence to Make Inferences

Writers don't always tell you exactly what's on their minds. Sometimes you need to make a reasonable guess about what the writer thinks. A reasonable guess, which is based on both evidence and your prior knowledge of a topic, is called an **inference**.

The passage below is about a creature known as the giant squid. You will read it twice.

For many years, both sailors and scientists suspected that a creature they called the giant squid lived in the ocean depths. Over the years, the evidence mounted, and in 2012 came solid proof: They filmed giant squids swimming in the ocean.

Before the 2012 video, nobody had answers to several significant questions about giant squids. How did they act in the wild? Were they hunters? Or did they just float in the water, eating what came their way? What purpose did their huge eyes serve? Thanks to the video, we have some answers. We know that the squid is a hunter that uses its large eyes to spot prey and avoid being eaten. But many fascinating mysteries about the creature still need solving. Will this important research continue?

Read the passage again. This time, underline any evidence suggesting whether the writer feels scientists should keep researching the giant squid.

So, does the writer think that scientists should keep researching the giant squid? You can use evidence from the text to make and support an inference about what she thinks.

Study the chart. It shows how you can support an inference using textual evidence.

What You Know	+	What the Text Says	=	Inference
A person with positive feelings about a type of work usually wants that work to continue.		<ul style="list-style-type: none"> • "Before the 2012 video, nobody had answers to several significant questions about giant squids." • "But many fascinating mysteries about the creature still need solving." • "Will this important research continue?" 		The author thinks that scientists should keep researching the giant squid.

By using text evidence and what you already know, you can make and support inferences. In a way, you make the same kinds of educated guesses that scientists do when they study mysterious creatures of the deep!



Read the first part of a scientific account about Bigfoot.

Genre: Scientific Account

A Scientist’s Search for Bigfoot *by Tetsuo Fujii*

Dr. Jeffrey Meldrum is an Associate Professor of Anatomy and Anthropology at Idaho State University. He specializes in primate foot structure—a category that includes apes, monkeys, and humans. His interests also include evaluating footprints that some claim are left by a mythical North American ape known as Bigfoot.

Meldrum’s laboratory houses more than 200 casts and artifacts relating to Bigfoot. Although he believes that some samples are hoaxes, others interest him, such as unidentified hair and unique casts of muscle and foot-bone anatomy.

(continued)

Explore how to answer this question: *“Dr. Meldrum thinks that some samples are hoaxes, but others interest him. Why is he most likely interested in those other samples?”*

Reread the second paragraph. It suggests what Dr. Meldrum thinks, but does not state it directly.

Look for details suggesting why Meldrum is interested in the other samples. One detail is listed in the second column; write another detail there. Then complete the inference statement.

What You Know	+	What the Text Says	=	Inference
<ul style="list-style-type: none"> • If a scientist is interested in something, he or she might think it has scientific value. • A scientist might keep samples that could lead to a discovery. 		<ul style="list-style-type: none"> • “Meldrum’s laboratory houses more than 200 casts and artifacts relating to Bigfoot.” • 		Dr. Meldrum is most likely interested in those other samples because . . .

On the lines below, explain how the details you presented in the chart support your inference.



Close Reading

What do most other scientists think about Meldrum’s work?

Underline the sentence that tells how they feel about it.

Continue reading the account about Meldrum’s research. Use the Close Reading and the Hint to help you answer the question.

(continued from page 20)

Many anthropologists criticize Meldrum’s work. They feel he is trying to find an imaginary creature that exists only in folklore. Meldrum tells critics he is not saying that Bigfoot exists. He just believes there is enough evidence to justify scientific investigation.

Unsurprisingly, most anthropologists reject Meldrum’s evidence. Dr. David J. Daegling, a University of Florida anthropologist who thinks Meldrum’s methods of analyzing data are unscientific, sums up this feeling: “Meldrum’s evidence doesn’t look better on deeper analysis; it looks worse.”

Hint

Which choice gives evidence of what most scientists think of Bigfoot research?

Circle the correct answer.

Which sentence from the account best supports the idea that most scientists do not find value in investigating Bigfoot artifacts?

- A “Many anthropologists criticize Meldrum’s work.”
- B “They feel he is trying to find an imaginary creature that exists only in folklore.”
- C “Meldrum tells critics he is not saying that Bigfoot exists.”
- D “He just believes there is enough evidence to justify scientific investigation.”



Show Your Thinking

Look at the answer you chose above. Explain how the evidence in your answer helped show that most scientists do not find value in investigating Bigfoot artifacts.



Read the scientific account. Use the Study Buddy and Close Reading to guide your reading.

Genre: Scientific Account



As I read, I'm going to underline clues that help me infer the author's viewpoint about chupacabras.

Close Reading

According to the author, why do people hope that chupacabras are real? **Underline** a sentence that shows the author's explanation.

What examples of new discoveries does the author give? **Underline** the evidence that new creatures have been discovered.

Tales of Chupacabras *by Cynthia Burnham*

- 1 Legend tells of the chupacabra, a monster that sucks the blood of livestock. *Chupacabra* means “goat sucker” in Spanish. For many in the southwestern United States and Mexico, these tales are more than just stories; they have been accepted as fact. In Puerto Rico in 1995, hundreds of livestock fatalities were blamed on the chupacabra.
- 2 Some describe chupacabras as two-legged, lizard-like creatures with claws, spikes, and piercing red eyes. Others insist they are hairless, four-legged creatures that are part kangaroo, part dog, and part rat. Many similar beasts have been brought to labs for DNA testing, but most have been coyotes with mange, a disease that strips animals of fur.
- 3 Why do we want these mythical beasts to be real? Surely not because we want livestock to fall prey to vampires! Perhaps it is because of our natural desire to shed light on the unknown. Scientists constantly identify new life-forms. According to the World Wildlife Federation, more than 1,200 species of plants and vertebrates were discovered in the Amazon rain forest between 1999 and 2009. Given this fact, the idea that undiscovered species could exist empowers our imaginations and gives us hope.
- 4 Although we have explored much of this planet, there are still creatures that lurk in the underbrush, evading recognition. That is a thrilling concept. So even as evidence mounts against the existence of chupacabras, a part of us hopes that one will creep from the shadows and boggle our minds.



Hints

Think about the word choice in each sentence. Which choice helps you infer what the author actually thinks about chupacabras?

Which sentence offers support for why people hope chupacabras are real?

What kinds of life-forms were discovered between 1999 and 2009? What is the author’s purpose for including this evidence?

Use the Hints on this page to help you answer the questions.

1 A student makes the following claim about the author of “Tales of Chupacabras.”

The author believes that chupacabras are imaginary even though she would like to think they exist.

Which sentence from the text best supports this claim?

- A** “*Chupacabra* means ‘goat sucker’ in Spanish.”
- B** “Some describe chupacabras as two-legged, lizard-like creatures with claws, spikes, and piercing red eyes.”
- C** “Why do we want these mythical beasts to be real?”
- D** “Scientists constantly identify new life-forms.”

2 Which sentence from the text explains why the author thinks people want to believe in chupacabras?

- A** “For many in the southwestern United States and Mexico, these tales are more than just stories: they have been accepted as fact.”
- B** “Legend tells of the chupacabra, a monster that sucks the blood of livestock.”
- C** “Others insist they are hairless four-legged creatures that are part kangaroo, part dog, and part rat.”
- D** “Perhaps it is because of our natural desire to shed light on the unknown.”

3 Explain how the examples of recent scientific discoveries support the idea that chupacabras may one day be found. Use details from the text in your explanation.



Read the scientific account. Then answer the questions that follow.

Looking for the Loch Ness Monster

by Stuart Clyburn

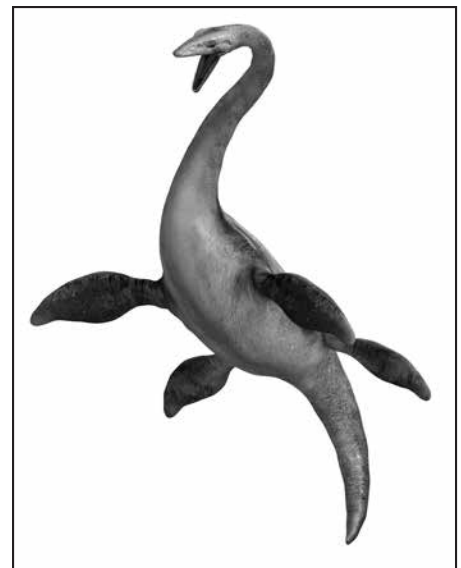
1 The word *loch* is a Scottish Gaelic word for *lake*. And there are a whole lot of lochs in Scotland—more than 500 of them! But one loch, Loch Ness in the Scottish Highlands, is known around the world. The reason for its fame is not its great size or beauty. People know the name *Loch Ness* because it is said to be the home of a mysterious, giant creature known as “the Loch Ness monster.” Whether the creature really exists or not has been a matter of great debate for decades.

2 What does “Nessie,” the popular nickname for the monster, supposedly look like? By most accounts, she has a small head on a very long neck. Her body is broad and rounded, with four flippers and a long tail. If you know your prehistoric creatures, you might be thinking: Nessie sounds like a *plesiosaur*, a giant sea reptile that lived hundreds of millions of years ago. One common theory about Nessie is that she actually *is* a plesiosaur. Other explanations for Nessie are far less dramatic. Some people think that the “mysterious” creature people have mistaken for a monster may have been nothing more than a walrus, seal, or eel.

3 How could a creature as big as a plesiosaur hide in a lake? Well, Loch Ness is a huge body of water. It’s the second largest loch in Scotland, based on the surface area of its water. Loch Ness covers more than 21 square miles, and only Loch Lomond is bigger. But if you look at the volume of water, Loch Ness is the biggest. And that’s because it’s deep—about 755 feet at its deepest point. This single loch contains more water than all the freshwater lakes in England. In other words, it’s one big place to hide.

4 Some people who believe in Nessie say that she’s made her home in the region for more than a thousand years. A book written in the seventh century tells about an Irish monk who saw a giant “water beast” in the River Ness in 565 C.E. No one thought much about that story until 1933. A couple was driving home along the loch late one night. They said they were forced to stop when a giant, dragon-like creature crossed the road and slid into the water. Their story appeared in newspapers. Soon, many more people claimed to have seen the monster. The following year, in 1934, a doctor from England took a photo that became famous worldwide. The poorly lit, grainy photo shows what looks like the head and long neck of a plesiosaur-like creature rising from the water. The photo served as “proof” of the monster until 60 years later—when it was revealed to be a fake.

5 Since the 1930s, dozens of serious, scientific searches have been undertaken to find the Loch Ness monster. One early effort involved placing scouts with cameras and binoculars around the loch for five weeks. Later searches relied on the use of sonar. This method involves bouncing sound waves through the deep



an artist's depiction of a plesiosaur



waters of the loch to detect moving objects. In 2003, the famous British Broadcasting Corporation (BBC) sponsored one of the most thorough searches ever. Scientists used 600 sonar beams and satellite tracking. What did they find? Nothing of note, really. They concluded that Nessie was a myth.

6 After so many attempts, you have to wonder why people keep looking for the Loch Ness monster. It may just be that there's something exciting about the idea of mysterious creatures living so close to us, always just out of view. There's a word for such creatures: *cryptids*. It comes from a Greek word meaning "to hide." The Loch Ness monster is one of many cryptids that have captured the public imagination. Others include Bigfoot in North America, the Yeti in the Himalaya Mountains, and the chupacabra in the southwestern United States and Mexico.

7 Many animals whose existence we take for granted today might once have been considered cryptids. Komodo dragons and giant squids were once thought to be tall tales. Until 1902, people regarded stories of "giant ape-men" living in Africa as just a myth. Today, we know them as mountain gorillas. The odds of "Nessie" turning out to be real may not be quite as good. But if it were true, we'd all love it, wouldn't we? It's exciting to think that a real live monster lives deep in a loch in Scotland.

1 According to the account, what is one reason many people believe the Loch Ness monster does not exist?

- A** The earliest sighting of the Loch Ness monster occurred in 565 c.e.
- B** The photo taken in 1934 has been proven to be a fake.
- C** Plesiosaurs, like the dinosaurs, lived hundreds of millions of years ago.
- D** Sonar beams and satellite tracking found no evidence in the loch.

2 Which detail provides evidence that a creature as huge as a plesiosaur could really hide in Loch Ness?

- A** Loch Ness has a surface area of 21 square miles and is 755 feet deep.
- B** The Loch Ness monster might actually be an ordinary walrus, seal, or eel.
- C** Dozens of scientific searches of Loch Ness have been conducted.
- D** The Loch Ness monster is known as a cryptid, a word whose root word means "to hide."



- 3 Which statement is **best** supported by the account?
- A It is illogical to think that a plesiosaur could still be living in Loch Ness today.
 - B Someday, scientists will prove that no giant creatures live in Loch Ness.
 - C Some people want to believe in the Loch Ness monster and ignore scientific evidence showing it does not exist.
 - D People have always been fascinated by the idea of strange creatures such as Bigfoot and the Loch Ness monster.

- 4 Despite the great interest in the Loch Ness monster, it is highly unlikely that such an animal actually exists. Which sentence from the passage **best** supports this conclusion?
- A "Whether the creature really exists or not has been a matter of great debate for decades."
 - B "Some people who believe in Nessie say that she's made her home in the region for more than a thousand years."
 - C "Since the 1930s, dozens of serious, scientific searches have been undertaken to find the Loch Ness monster."
 - D "Many animals whose existence we take for granted today might once have been considered cryptids."

- 5 Some people firmly believe that the Loch Ness monster is actually a plesiosaur. Use at least **three** details from the account to explain why some people believe this.



Self Check

Go back and see what you can check off on the Self Check on page 2.