Have you ever noticed strange bumps on stems, leaves, flowers, or tree branches? Well, they are part of the plant and grown by the plant, but they are homes for tiny insects! These bumps are called galls.

Insects form galls. The plant does not decide to grow them. Typically, a female insect lays her eggs on a plant. After the baby insects hatch, special chemicals are left on the plant. These special chemicals cause the plant to bubble up and form a gall. Once a gall has grown, the insects have a safe place to live and eat, or do they?

Other animals, besides insects, benefit from galls. Galls are also great places for birds and small animals to find a meal. Woodpeckers, squirrels, mice, and bats all use galls as a source for a tasty insect snack. If a gall has a large hole poked into it, a larger creature may have stopped for a bite.

Now that you know what a gall is, you will probably begin to notice them everywhere. Look around. You may even decide to break open a gall and take a peek inside. If the gall has a little hole, the owner has probably left. Can you believe it? A little house for an insect made by a plant!

Questions

1) Based on information in paragraph 2, it can be understood that an unhatched insect egg laid on a plant would most likely cause

   A. the plant to die
   B. no gall to form
   C. a large gall
   D. a bird to eat the egg

2) Which statement from the passage best describes how galls are formed?

   A. “Once a gall has grown, the insects have a safe place to live and eat, or do they?”
   B. “These bumps are called galls.”
   C. “These special chemicals cause the plant to bubble up and form a gall.”
   D. “Typically, a female insect lays her eggs on a plant.”

3) At the end of paragraph 2, the author asks the question “or do they?” The author does this to

   A. explain why insects may not be safe inside their galls
   B. ask the reader if the insects are safe inside their galls
   C. admit that he or she does not really know the answer
   D. encourage us to keep reading to discover the answer
4) Based on its use in paragraph 3, it can be understood that benefit belongs to which of the following word groups?
   A. love, adore, like
   B. hurt, offend, upset
   C. teach, instruct, direct
   D. gain, advance, profit

5) If a gall has a large hole in it, this means that
   A. a larger creature may have stopped for a bite
   B. the owner has probably left
   C. special chemicals are left on the plant
   D. they are homes for tiny insects

6) This passage is mostly meant to
   A. entertain
   B. inform
   C. persuade
   D. describe

7) The information presented in paragraph 3 most likely resulted from the work of which of the following types of scientist?
   A. a zoologist, who studies the behavior, structure, and classification of animals.
   B. an ecologist, who studies the relationships of organisms to one another and to their physical surroundings.
   C. an entomologist, who studies the behavior, structure, and classification of insects.
   D. a chemist, who is engaged in chemical research or experiments.
Answers and Explanations

1) **B**

In paragraph 2, the author explains that “after the baby insects hatch,” chemicals left on the plant “cause the plant to bubble up and form a gall.” This lets us know that hatching is necessary to cause the formation of galls. During this process, chemicals are released that, when left on the plant, form galls. Using this information, we can conclude that if the insect never hatches, the chemicals are never released, and no gall will form. This means that based on the information in paragraph 2, an unhatched insect egg laid on a plant would most likely cause no gall to form. Therefore (B) is correct. Paragraph 2 does not provide any information to support choices (A), (C), or (D). This means they are incorrect.

2) **C**

To answer this detail question correctly, we need to find where the author discusses how galls are formed in the passage. A good way to do this is to scan the topic sentence of each paragraph, since this sentence will likely tell us what information can be found in the rest of that paragraph. The topic sentence of paragraph 2 starts with: “Galls are also great places for birds and small animals to find a meal.” This lets us know that the details we are looking for can likely be found in paragraph 2. In paragraph 2, the author focuses on the how galls are formed. The author explains that, “after the baby insects hatch,” chemicals left on the plant “cause the plant to bubble up and form a gall.” The last part of this selection, containing the statement, “These special chemicals cause the plant to bubble up and form a gall” accurately describes how galls are formed. Therefore (C) is correct. At the end of paragraph 2, the author writes, “Once a gall has grown, the insects have a safe place to live and eat, or do they?” Since the author starts with “Once a gall has grown…” we can tell that this statement describes something that will happen after a gall has been formed. This lets us know that this statement does not best describe how galls are formed, so (A) is incorrect. At the end of paragraph 1, the author writes, “These bumps are called galls.” This statement simply introduces the topic. We can see that it does not explain how galls are formed but instead explains what to call the bumps we have seen on “stems, leaves, flowers, or tree branches.” Using this information, we can tell that the statement, “These bumps are called galls,” does not explain how galls are formed. This means (B) is incorrect. In paragraph 2, the author writes, “Typically, a female insect lays her eggs on a plant.” While this statement does describe the first part of the process by which galls are created, it does not explain how the gall itself is formed. This lets us know that the statement, “Typically, a female insect lays her eggs on a plant,” does not best describe how galls are formed. Therefore (D) is incorrect.

3) **D**

At the end of paragraph 2, the author writes, “Once a gall has grown, the insects have a safe place to live and eat, or do they?” Because the question “…or do they?” comes at the end of the paragraph, and we can see that the author has written another paragraph to follow it, we can conclude that the author wants us to keep reading. We know that he or she wants us to discover if the insects do indeed have a safe place to live and eat because this question is a tactic that the author uses to end the paragraph in a suspenseful way. This way we feel we must continue reading to find out the answer. Using this information, we can tell that at the end of paragraph 2, the author asks the question “or do they?” most likely to encourage us to keep reading to discover the answer. This means (D) is correct. Typically, explanations are statements, not questions, because asking a question is not the best way to explain something. Using this information, we can tell that the author does not ask the question “or do they?” most likely to explain why insects may not be safe inside their galls. Therefore (A) is incorrect. It would not make sense for the author to ask us a question, since we have no way of responding with an answer. In addition because he or she wrote the passage, the author is most likely to already know the answer. Using this information, we can tell that the author does not ask the question “or do they?” most likely to ask the reader if the insects are safe inside their galls. This means (B) is incorrect. When someone admits something, they do not usually do so in a question form. Typically, people use a statement to admit. Using this information, we can tell that the author does not ask the question “or do they?” most likely to admit that he or she does not really know the answer. In addition, the author seems to be writing about a subject he or she knows well. Because he or she would want to seem informed about the subject they are writing about, we can tell that it is unlikely that the author would admit that he or she does not really know the answer. This makes (C) incorrect.

4) **D**

**benefit (verb): receive an advantage, gain.**

In paragraph 3, the author writes, “Other animals, besides insects, benefit from galls.” We can use context clues—hints from known words or phrases around the unknown word or phrase—to help us figure out what benefit most nearly means. In the sentence that follows, the author writes, “Galls are also great places for birds and small animals to find a meal.” Since birds and small animals would be considered “other animals” that benefit from galls, we can tell that finding a good food source is an example of a way that animals benefit. If we look at finding food as a way that animals gain an advantage over other animals that cannot find food in the wild, we can understand that benefit must mean something like receive an advantage or gain. Since the author notes that insects benefit from galls because galls provide homes for them, we can see that our definition for benefit works in the instance described earlier too. Using this information, we can tell that benefit belongs to word group containing gain, advance, and profit, since all of these words have to do with receiving an advantage or gaining. Therefore (D) is correct. **Love, adore, and like** are all words that deal with feeling strong adoration for something. Using the above information, we know that we are looking for the word group that contains words that mean receiving an advantage, or gain from something. Since love, adore and like do not involve gaining, or advancing because they should be selfless emotions that we feel, we can tell that benefit does not belong to this word group. This means (A) is incorrect. **Hurt, offend, and upset** are all words that describe something negative that happens. This would be the opposite of a gain or receiving an advantage. Using this information, we can tell that benefit does not belong to the word group containing hurt, offend, and upset. Therefore (B) is incorrect. **Teach, instruct, and direct** are all words that describe how someone passes on information to someone else, or gets someone else to discover something new. Using the above information, we know that benefit describes receiving an advantage or a gain. Since these two meanings are different, we can tell that benefit does not belong to the word group that contains teach, instruct, and direct. This means (C) is incorrect.

5) **A**
In paragraph 3, the author writes, “If a gall has a large hole poked into it, a larger creature may have stopped for a bite.” Using this information we can tell that a gall with a large hole in it means that a larger creature may have stopped for a bite. Therefore (A) is correct. The passage does not provide any information to support choices (B), (C), or (D). Therefore they are incorrect.

6) B
In we paragraph 1—often called the introduction—we learn that this passage will provide information about “bumps called galls.” After introducing this topic, the next paragraph gives background information on how galls are formed. The author writes, “Insects form galls.” Next, the author gives us more information about other animals that “benefit from galls.” Through all of this, the author provides information, informs us, about a little known aspect of nature. Finally, the author writes, “Now that you know what a gall is,...” Since the author assumes that we know about galls after reading the passage, we can conclude that author meant to inform us about galls in this passage. Using this information, we can tell that this passage is mostly meant to inform. Therefore (B) is correct.

A passage that is mostly meant to entertain would most likely be somewhat humorous, pleasing, or shocking to many different types of people. Also, stories that are not real are often meant to entertain an audience. Using the above information, we can tell that this passage is not mostly meant to entertain, because no story is told, and we learn information—facts—about a real part of nature. While someone interested in learning about science might find this entertaining, we would not say that this passage is mostly meant to entertain a larger, more general, audience. This means (A) is incorrect. A passage that is mostly meant to persuade would try to argue some point of view. In this passage, the author passes on information about galls but never tries to get us to feel any certain way about them. Because the author never tries to persuade us, we can tell that this passage is not mostly meant to persuade. This means (C) is incorrect. In the first paragraph the author mentions “strange bumps” known as galls, but he or she never gives a more in depth description of what galls actually look like. Instead, the author informs us about how galls are formed in the next paragraph, and then the author informs us about how other animals benefit from galls in paragraph 3. Using this information, we can see that this passage is not mostly meant to describe. Therefore (D) is incorrect.

7) B
In paragraph 3, the author first writes, “Other animals, besides insects, benefit from galls.” This lets us know that the author will write about other animals that come into contact with galls in this paragraph. Next, the author writes, “Woodpeckers, squirrels, mice, and bats all use galls as a source for a tasty insect snack.” This shows how different types of small animals use galls to find insects for food. An ecologist is a person who studies the relationships of organisms to one another and to their physical surroundings. For this reason, we can see that an ecologist would be interested in how small animals interact with insects (a relationship between organisms) using galls (a part of the organisms’ physical surroundings). This means the information found in paragraph 3 most likely resulted from the work of an ecologist. Therefore (B) is correct. While a zoologist is a person who studies the behavior, structure, and classification of animals, using the above information, we can see that in this paragraph the author provides information about the interaction between different types of organisms. For this reason, the information presented in paragraph 3 most likely resulted from the work of an ecologist, rather than a zoologist. This means (A) is incorrect. While an entomologist is a person who studies the behavior, structure, and classification of insects, using the above information, we can see that in this paragraph the author is writing about “other animals, besides insects [that] benefit from galls.” This lets us know that the information presented in paragraph 3 most likely resulted from someone who studies the interactions between different types of organisms—like an ecologist—as opposed to an entomologist. This means (C) is incorrect. In paragraph 2, the author mentions “special chemicals [that] cause the plant to bubble up and form a gall,” the information in paragraph 3 mostly focuses on how different organisms interact around galls. For this reason, a chemist who is engaged in chemical research and experiments, is less likely to have produced the information presented in paragraph 3 than an ecologist. Therefore (D) is incorrect.