

Focus On Scientists

Science is the study of different things in the world. **Scientists** observe, study, and test ideas to discover things that help people. Look inside to discover some facts about scientists.

The Scientists Behind the Science



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Benjamin Franklin

An **inventor** creates things that help make people's lives easier. Benjamin Franklin was an inventor. He invented a new kind of stove, the lightning rod, bifocal glasses, and much more. He also created the first library in our country. Benjamin Franklin was born more than 300 years ago on January 17.

A **forensic** (fuh-REHN-sik) **scientist** helps solve crimes. Dr. Henry Lee is a forensic scientist. He focuses on fingerprint matching. When people touch an object, they leave fingerprints on it. Forensic scientists carefully study fingerprints at a crime scene.

An **astronomer** (uh-STRAH-nuh-mer) studies the universe beyond Earth. Ellen Ochoa is an astronomer who has joined other astronauts in space. Since 1991, she has been on two spaceflights. Ellen Ochoa studies how the sun affects Earth's atmosphere and climate.



AP/Wide World Photos; Jean-Marc Bouju

Jane Goodall at a sanctuary for chimpanzees in Kenya.

A **primatologist** (prigh-muh-TAH-luh-jist) studies intelligent animals, such as monkeys, chimpanzees, and apes. Those animals are known as primates. Dr. Jane Goodall has been studying chimpanzees in Africa for almost 40 years. She has learned their habits and earned their trust. Chimps are in danger of dying out. Dr. Goodall works to help to save them and their habitat.

Read About Other Kinds of Scientists

A **meteorologist** (mee-tee-uh-RAH-luh-jist) studies the weather and climate.

A **paleontologist** (pay-lee-ahn-TAH-luh-jist) studies fossils, or ancient plant and animal remains.

A **volcanologist** (vuhl-kuh-NAH-luh-jist) studies volcanoes.

A **zoologist** (zoh-AH-luh-jist) studies animals.

An **entomologist** (en-tuh-MAH-luh-jist) studies insects.

A **marine biologist** (muh-REEN bigh-AH-luh-jist) studies ocean life.

Name: _____

Date: _____

Directions: Answer the following four questions based on the information in the passage.

1. According to the passage, what is Benjamin Franklin known for?

2. Which scientists in the passage study living things?

3. Which scientist might a person call if he or she needed help identifying an insect?

4. What is this passage mostly about?

Directions: Please read the sentence below and then write the word or phrase that best answers the questions. The first answer has been provided for you.

Forensic scientists help police solve mysteries by studying clues left at crime scenes.

Who? forensic scientists

5. (do) What?

6. How?

7. Where?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Dr. Jane Goodall studies chimpanzees, _____ she is an example of a primatologist.

- A but
- B because
- C so

Directions: Read the vocabulary word and definition below. Then answer questions 9 and 10.

Vocabulary Word: **observe** (ob · serve): to watch something closely and pay close attention to it.

9. Read the sentences below and underline all forms of the word **observe**.
- a. My science homework is to observe the moon each night this month to see how it changes.
 - b. Julia sat at the table by the window so that she could observe the people walking by.
 - c. I observed the spider as it made its web, and I found it very interesting.
 - d. We observed our teacher as she demonstrated how to conduct the science experiment.
 - e. The baby observed his older sister as she played with a new toy.
10. Which is NOT the more helpful thing for observing the stars in a night sky?



Teacher Guide and Answer Key

Passage Reading Level: Lexile 710

Featured Text Structure: Enumerative – the writer includes a list, giving examples of something. This text structure is often combined with cause/effect or problem/solution.

Passage Summary: This passage lists several kinds of scientists and describes the work they do.

To the Teacher: Read the passage aloud to the class [TIP: while reading aloud, show the passage on a whiteboard or give each student a copy of the passage so they can follow along].

Then, use the text-dependent questions 1-8 to facilitate a whole class discussion to ensure students comprehend the key details from the passage.

Finally, use questions 9-10 to deep teach one important vocabulary word [TIP: you can use the model provided for teaching additional vocabulary].

1. According to the passage, what is Benjamin Franklin known for? [Important Detail]

Suggested answer: Benjamin Franklin is known for inventing a kind of stove, the lightning rod, and bifocal glasses. He is also known for creating the first library in our country. [paragraph 2]

2. Which scientists in the passage study living things? [Important Detail]

Suggested answer: Primatologists, zoologists, entomologists, and marine biologists study living things. [paragraphs 5, 9, 10, and 11]

3. Which scientist might a person call if he or she needed help identifying an insect? [Important Detail]

Suggested answer: An entomologist is a scientist who specializes in insects, so he or she would be able to identify an insect. [paragraph 3]

4. What is this passage mostly about? [Main Idea]

Suggested answer: This passage is mostly about the many different kinds of scientists that study different things.

Directions: Please read the sentence below and then write the word or phrase that best answers the questions. The first answer has been provided for you.

Forensic scientists help police solve mysteries by studying clues left at crime scenes.

Who? forensic scientists

5. (do) What? **help police solve mysteries**

6. How? **by studying clues**

7. Where? **at crime scenes**

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Dr. Jane Goodall studies chimpanzees, _____ she is an example of a primatologist.

A but

B because

C so

To the Teacher: ReadWorks recommends that you teach this vocabulary word to the whole class out loud using the four steps listed below.

Vocabulary Word: **observe** (ob · serve): to watch something closely and pay close attention to it.

Step 1: Introduce the word

- Teacher writes the word on the board and divides it into syllables: (ob · serve)
- Teacher says: "This word is observe. What is the word?" [All students reply together out loud: "Observe."]

Step 2: Provide a child-friendly definition

- Teacher says: "When you observe something, you watch it closely and pay close attention to it."
- Teacher says: "In the passage, scientists observe things to learn about them."

- c. Teacher says: "What is the word?" [All students reply together out loud: "Observe."]

Step 3: Practice the word

Teacher provides examples and additional opportunities to repeat the word. Read the first sentence out loud to your students. Begin reading it again and when you come to the vocabulary word prompt students to say the vocabulary word out loud. Then, finish reading the sentence out loud to your students.

Directions: Read the vocabulary word and definition below. Then answer questions 9 and 10.

Vocabulary Word: **observe** (ob · serve): to watch something closely and pay close attention to it.

9. Read the sentences below and underline all forms of the word **observe**.
- My science homework is to observe the moon each night this month to see how it changes.
 - Julia sat at the table by the window so that she could observe the people walking by.
 - I observed the spider as it made its web, and I found it very interesting.
 - We observed our teacher as she demonstrated how to conduct the science experiment.
 - The baby observed his older sister as she played with a new toy.

Step 4: Check for student understanding

To the Teacher: This step can be completed as a whole class activity or as an independent practice.

10. Which is NOT the more helpful thing for observing the stars in a night sky?



Suggested Additional Vocabulary: intelligent