



Green “fuzz” appears on oranges that are getting old. Is it magic? It is not. But before Louis Pasteur (1822–1895) discovered microbes, some people believed that the green fuzz came from nothing!

Microbes are living things that are so tiny we can’t see them without a microscope. Thanks to Pasteur, we know that tiny life forms grow all around us—and even in us.

Microbiology is the study of microbes, or **microorganisms**. They are sometimes called **germs**. Microorganisms can cause diseases, or illnesses. For example, they cause colds and the flu.

Some microorganisms are beneficial. They live in a healthy body. Helpful microorganisms also live in the soil. They help to break down old plant material to make soil richer.

Pasteur studied microbes to find ways to prevent diseases caused by microbes. He developed **vaccines** to protect people from the diseases.

Pasteurization is a process that uses heat to kill harmful microorganisms in milk. Pasteurization was named after Pasteur.

Use the context clues in the passage and information in the Tip box to help you find the word that completes each sentence.

- 1 The study of tiny life forms is called ■.
- 2 Scientists who study germs are called ■.
- 3 A ■ helps to prevent illness caused by microbes.
- 4 The process of ■ can help prevent disease caused by microorganisms in milk.
- 5 Germs are also called ■.
- 6 Microorganisms can be ■ or harmful.
- 7 People did not know how mold got on oranges before Pasteur ■ microbes.
- 8 Pasteur proved that some ■ are caused by microbes.
- 9 Vaccines can ■ people from some diseases.
- 10 Heat kills ■ germs in some foods.
- 11 Pasteur needed a ■ to see microbes.
- 12 Another word for *helpful* is ■.

Tip

Prefixes and suffixes may give **context clues** for special science words.

For example:

- **micro-** means *tiny*
- **bio-** means *life*
- **-ology** means *the study of something*
- **-ist** means *a person who works at or is interested in something*
- **bene-** means *good*



A	B	C	D	E	F
discovered	harmful	vaccine	microscope	beneficial	diseases
pasteurization	microbiology	microbes	protect	helpful	microbiologists
G	H	I	J	K	L

Objective: Use context clues, prefixes, and suffixes to find the meaning of academic vocabulary and domain-specific vocabulary in informational text (description, comparison).

