

Tiny Organism Evidence

Use evidence to evaluate how microorganisms affect larger organisms.

S5L4 "Obtain, evaluate, and communicate information about how microorganisms benefit or harm larger organisms."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline details that show a microorganism helps or harms a larger organism, and circle the sentence that evaluates the claim that all bacteria are harmful.

Helpful and Harmful Microbes

- ① Microorganisms are living things too small to see without a microscope. Some live in and on your body. In a healthy gut, helpful bacteria help break down parts of food that your body cannot digest alone. They also compete with some harmful microbes for space and food. This can make it harder for harmful microbes to grow.
- ② People use certain bacteria to make yogurt. In warm milk, these bacteria change milk sugar into lactic acid. The acid gives yogurt its tangy taste and helps stop many other microbes from growing quickly. This evidence shows that the bacteria benefit people by helping produce a food and by making it less likely to spoil soon.
- ③ Not all microorganisms help. Salmonella bacteria can enter food when people do not wash hands or cook food safely. If someone eats the contaminated food, the bacteria may cause illness, including stomach cramps, fever, or diarrhea. A claim that all bacteria are harmful is not supported by this information, because the earlier examples show useful bacteria.

2 ANSWER WITH EVIDENCE Use the passage

1 What are two ways helpful gut bacteria can benefit a person?

2 What evidence from the yogurt example shows that certain bacteria can benefit people?

3 Is the claim that all bacteria are harmful supported by the passage? Explain using information from the passage.

4 Name one action that can reduce the chance of harm from Salmonella. What harm can Salmonella cause?

3 YOUR TURN Your own words

Write exactly three sentences explaining how yeast benefits people. State a claim, give one fact that supports it, and explain how the fact supports your claim.

PART 1 • READ AND MARK

Underline details that show a microorganism helps or harms a larger organism, and circle the sentence that evaluates the claim that all bacteria are harmful. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What are two ways helpful gut bacteria can benefit a person?	They help break down parts of food the body cannot digest alone, and they compete with harmful microbes for space and food.
2	What evidence from the yogurt example shows that certain bacteria can benefit people?	The bacteria help make yogurt, and the lactic acid they produce helps stop many other microbes from growing quickly, so the yogurt is less likely to spoil soon.
3	Is the claim that all bacteria are harmful supported by the passage? Explain using information from the passage.	No. Helpful gut bacteria aid digestion, and certain bacteria help make yogurt and slow the growth of other microbes.
4	Name one action that can reduce the chance of harm from Salmonella. What harm can Salmonella cause?	Wash hands or cook food safely. Salmonella can cause illness such as stomach cramps, fever, or diarrhea.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Yeast benefits people when they bake bread. Yeast feeds on sugars in dough and releases carbon dioxide gas. The gas forms bubbles that make the dough rise.

Accept equivalent passage-based evidence for Parts 1 and 2. For Your Turn, accept any accurate three-sentence claim, supporting fact, and explanation about how yeast benefits people.