Health Disease

KS3 Biology · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

What is the difference between a communicable and a non-communicable disease?

Step 1 · Communicable

Caused by a pathogen and can be passed from person to person, e.g. flu, measles, chickenpox.

Step 2 · Non-communicable

Cannot be caught, e.g. heart disease, type 2 diabetes, most cancers. Often linked to lifestyle and genes.

Answer: Communicable = caused by pathogens and can spread; non-communicable = cannot be caught

Check: Ask: can you catch it from someone?

2. Now try one with the steps

Why can't antibiotics cure a cold?

Step 1 · Cause

Step 2 · What antibiotics do

Answer:

3. Practice

Show your working. The marks tell you how much is expected.

1. What is a pathogen? [1]

2. Name FOUR types of pathogen. [2]

3. Give ONE way the body stops pathogens getting in. [1]

4. Name ONE disease caused by a virus. [1]

5. What do antibiotics treat? [1]

6. What are antibodies? [1]

7. Give ONE way communicable diseases can spread. [1]

8. Explain how a vaccine leads to immunity. [3]

9. Why should you finish a course of antibiotics? [2]

10. Give ONE example of a non-communicable disease. [1]

11. Why do you usually only get chickenpox once? [2]

12. A bacterium divides every 20 minutes. Starting with 1, how many are there after 2 hours? [2]

13. In a school of 1200, 90% have had a flu vaccine. How many have not? [1]

14. Explain why a new flu vaccine is needed most years but the measles vaccine lasts for life. [2]

4. Before you hand it in

"Antibiotics kill viruses."

Antibiotics treat bacterial infections. Viral infections are prevented by vaccines and some are treated with antiviral drugs.

"Your body becomes resistant to antibiotics."

BACTERIA become resistant by natural selection. Your body doesn't.

"Vaccines give you the disease."

They cannot cause the disease; they train your immune system. Mild side effects like a sore arm are common and short.