

Infection & Response

Reading – page 43-48 higher, page 42-48 foundation

Knowledge

1. What is a 'pathogen'?
2. Name the two ways pathogens can make us ill
3. Where do viruses reproduce?
4. Name the 3 ways that white blood cells fight pathogens and their effects
5. What is in a vaccine?
6. What is 'phagocytosis'?
7. What is a pandemic?
8. What is meant by a 'vector' in infectious disease?
9. What are antibiotics?

Apply

1. Describe how a virus infects the body and causes illness

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2. Explain how white blood cells fight pathogens that do get into the body (3 ways)

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3. Explain why antibiotics cannot be used against viruses

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4. Explain how a vaccine for the virus Polio stops a person becoming ill from the disease

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5. Describe how the following measures help to stop the spread of disease:

Washing hands .....

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Spraying insecticides.....

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Vaccination programmes.....

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6. Complete the table below for common infectious diseases

| Infection            | Type   | How it's passed on & symptoms                          | Reduction of spread/ Treatment                                  |
|----------------------|--------|--|---|
| HIV                  | virus  |  |   |
| Measles              |        |  |   |
| Tobacco Mosaic Virus |        | Mosaic pattern on leaves means reduced photosynthesis. |   |
| Gonorrhoea           |        |  |   |
| Salmonella           |        |  | Cook food thoroughly (especially chicken)<br>Vaccinate chickens |
| Malaria              |        |  |   |
| Rose black spot      | fungus |  |   |

7. Describe how the following help protect the body from pathogens:

| Mechanism  | How it prevents infection |
|--|---------------------------|
| The trachea is lined with cells that produce mucus and have cilia on the surface |                           |
| The stomach contains hydrochloric acid   |                           |
| The skin can form scabs when cut   |                           |