Treatment of disease

Reading: pages 50-52

1. What is in a vaccine?

2. Complete the table to show pros and cons for vaccines:

Advantages	Disadvantages

3. Which group of microbes can antibiotics kill?

4. Where do many drugs come from initially?

5. What is a placebo?

6. What is the first stage in testing a new drug?

7. What does the MMR vaccine protect against?

8. What is MRSA?

9. What is a 'double blind' trial?

10. What does the term 'efficacy' of a drug mean?

Application

1. Explain why antibiotics cannot be used to treat viral infections

……

……

2. Describe two ways that the spread of antibiotic resistant bacteria can be slowed.

……

……

……

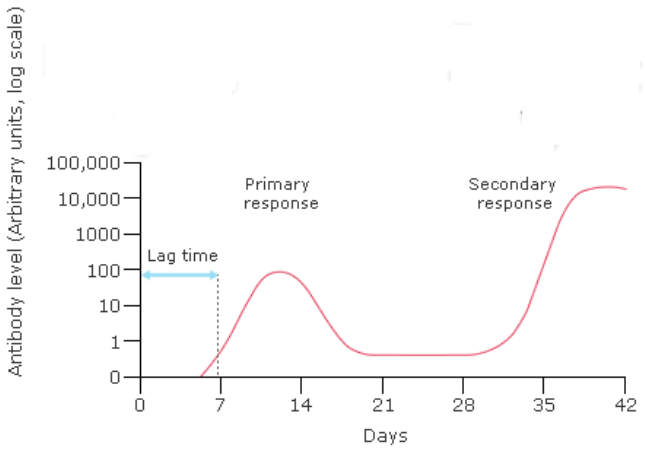
3. Explain how a vaccine for measles prevents future suffering from measles

……

……

……

4. Look at the graph below:



a) What do you think is happening during 'lag time'?

……

……

b) Compare the primary response with the secondary response

……

……

……

……

……

c) Why is the secondary response so much quicker than the primary one?

……

……

5. Complete the table:

Stage in drug development	Reason
Tested in lab on cells and tissues	
Tested on mammals like rats & monkeys	
Tested on healthy volunteers	
Tested on small number of patients	
Tested on large number of patients	