Treatment of disease

Reading: pages 47-49 higher & foundation

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 like measles.

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2. Antibiotic-resistant strains of bacteria are causing problems in most hospitals.

Explain, as fully as you can, how antibiotic resistant strains of bacteria, such as MRSA, have evolved.

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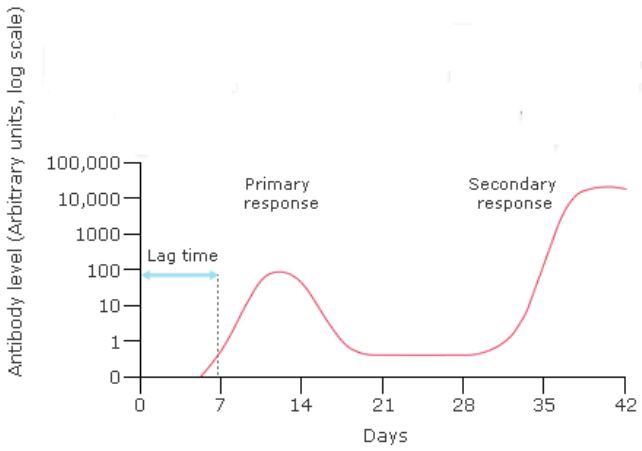
3. Look at the graph below:



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

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b) Compare the primary response with the secondary response

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

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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	