

EXERCISE: **MICROORGANISMS**

1. What is a feature of bacteria?

- A** They are always parasitic  
**B** They have a nucleus  
**C** They are made of hyphae  
**D** They are reproduced by binary fission

2. "This group of organisms have long thread like bodies. Their cells contain nuclei. Some of them produce antibiotics". (June 2006/Q. 26)

Which group of organisms is being described?

- A** Bacteria  
**B** Fungi  
**C** Plants  
**D** Viruses

3. Using the key, which organism is a virus?

1. Has a cell wall..... go to 2  
 Does not have a cell wall..... go to 3
2. Cell wall is made of chitin..... organism **A**  
 Cell wall is made of cellulose..... organism **B**
3. Has a protein coat..... organism **C**  
 Has a cell membrane..... organism **D**

4. The table shows the characteristics of four microbes. Which one could be a virus?

	contains DNA	contains one or more cells	contains one or more cell nuclei	produces spores
<b>A</b>	✓	x	x	x
<b>B</b>	✓	✓	x	x
<b>C</b>	✓	✓	✓	x
<b>D</b>	✓	✓	✓	✓

key  
 ✓ = true  
 x = false

5. The table shows some structures found in four different cells. Which cell is from a fungus?

	cell wall	cell membrane	nuclear membrane	chloroplasts
<b>A</b>	✓	✓	✓	✓
<b>B</b>	x	✓	✓	✓
<b>C</b>	✓	✓	x	x
<b>D</b>	✓	✓	✓	x

key  
 ✓ = present  
 x = absent

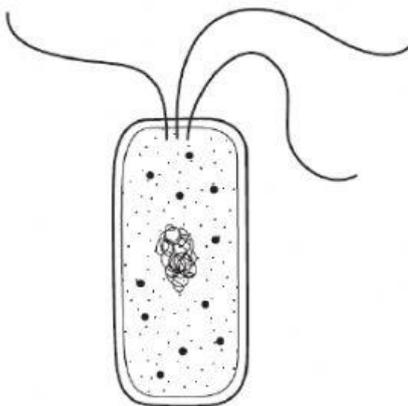
6. A patient with a sore throat went to the doctor. The doctor examined the patient and then prescribed an antibiotic as treatment. What was the cause of the sore throat?

- A** bacteria  
**B** tobacco smoke  
**C** viruses  
**D** yeasts

7. When are antibiotics likely to be most effective?

- A** infection is caused by a bacterium or fungus  
**B** infection is caused by a virus  
**C** The disease is cancerous  
**D** The pathogen can digest the antibiotics

8. The diagram shows the structure of a bacterium.



In what way does this differ from a cell of a fungus?

- A** The bacterium has a cell membrane  
**B** The bacterium has a cell wall  
**C** The bacterium has cytoplasm  
**D** The bacterium has no true nucleus

9. A new organism is discovered. It is found to be made of cells and contains DNA. To which group of organisms could it belong to and to which group could it not belong?

	could be	could <b>not</b> be
<b>A</b>	bacteria	fungi
<b>B</b>	bacteria	viruses
<b>C</b>	fungi	bacteria
<b>D</b>	viruses	bacteria

10. Yeast is used in alcohol production. Under which conditions will yeast produce most alcohol?

	glucose present	oxygen present
<b>A</b>	✓	✓
<b>B</b>	✓	x
<b>C</b>	x	✓
<b>D</b>	x	x