Multiple-choice test
Chapter 21: Biotechnology

Click on the correct answer to each question.

1 Which is an example of a biofuel?
- A coal
- B ethanol
- C oil
- D solar energy

2 What type of organism is yeast?
- A bacterium
- B fungus
- C plant
- D protoctist

3 Which substance produced by yeast helps in making bread?
- A biomass
- B carbon dioxide
- C ethanol
- D lactic acid

4 How is pectinase used in the food industry?
- A to make baby foods easier to digest
- B to break down stains on fabrics
- C to help to extract juice from fruits
- D to extend the shelf-life of processed foods

5 Which type of enzyme in a biological washing powder would help to remove blood stains caused by haemoglobin?
- A amylase
- B catalase
- C lipase
- D protease

S

6 Why are some milk products treated with lactase?

A to kill bacteria that would make them go sour

B to make foods that are digestible by people who do not produce lactase

C to digest proteins in the milk to amino acids

D to reduce the fat content of the milk

7 Penicillin is made by growing the fungus *Penicillium* in a fermenter.
Why are amino acids added to the fermenter?

A so that the fungus can make proteins

B to allow the fungus to respire

C to prevent the contents of the fermenter getting too hot

D to help to remove waste products such as carbon dioxide

8 What is the name of the enzymes that cut DNA and leave sticky ends?

A DNA ligases

B plasmids

C proteases

D restriction enzymes

9 In genetic engineering, what is the importance of plasmids?

A They are able to extract a desirable gene from a human cell.

B They can be used to transfer a gene into a bacterium.

C They help to cut DNA into manageable lengths.

D They stimulate bacteria to reproduce asexually.

10 A plasmid is a small circle of DNA present in a bacterial cell.
What does the term *recombinant plasmid* mean?

A a plasmid that has joined together with several other plasmids

B a plasmid to which a gene from a different organism has been added

C a plasmid that is no longer inside the bacterial cell

D a plasmid that has mutated to form a new kind of allele