

9.3 READING GUIDE – Fermentation (p. 262-265)



1) Under what conditions does fermentation occur? _____

2) During fermentation, what happens to the NADH produced in glycolysis?

3) Where in a cell does glycolysis occur? _____ fermentation? _____

4) What are the two main types of fermentation?
_____ and _____

5) How are lactic acid fermentation and alcoholic fermentation similar? How are they different?
(HINT: see figure 9.8 on p. 263)

• **SIMILAR:** _____

• **DIFFERENT:** _____

6) What are the reactants and products of **LACTIC ACID FERMENTATION**?

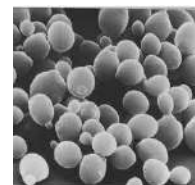
→ **REACTANTS:** _____

→ **PRODUCTS:** _____

7) What are the reactants and products of **ALCOHOLIC FERMENTATION**?

→ **REACTANTS:** _____

→ **PRODUCTS:** _____

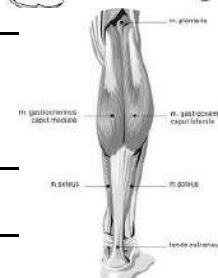
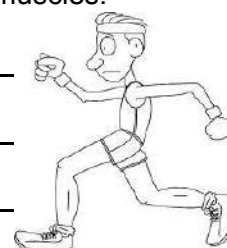


8) Fermentation in yeast produces _____ and in muscle cells _____.

9) Compare the energy-producing processes in a jogger's leg muscles and a sprinter's leg muscles:

• Which is likely to build up more lactic acid? **EXPLAIN.** _____

• Which is likely to be more out of breath after running? **EXPLAIN.** _____



10) WHY do your muscles burn after extensive, strenuous exercise? _____
