CELLULAR RESPIRATION WORKSHEET

1. a) Write the chemical formula for cellular respiration.

b) Write the formula, in words, for cellular respiration.

2. a) What group of organisms must rely on cellular respiration for energy?

b) Do autotrophs use cellular respiration?

3. a) What are the two main types of cellular respiration?

b) What is the difference between them?

4. a) Which step of cellular respiration do ALL organisms use?

b) Where does it occur in the cell?

c) What are the 2 products of this step?

5. a) Which types of organisms use lactic acid fermentation?

b) What happens with a build-up of lactic acid?

6. a) Which types of organisms use alcoholic fermentation?

b) What product accumulates as a result of alcoholic fermentation?
7.a) Where does aerobic respiration occur?

b) Draw a picture of this organelle and label the inner membrane, outer membrane, and the matrix.

8. What happens in the first step of aerobic respiration? (2 things)

9.a) What is another name for the Krebs cycle?

b) What are the two products of the Krebs cycle?

10. What is the net gain of ATP following glycolysis and the Krebs cycle?

11.a) What are the two carrier molecules used in the electron transport chain of aerobic respiration?

b) How much ATP is generated by the ETC?

c) Write the break-down of ATP gain for each step of cellular respiration.

d) What is the final electron acceptor for aerobic respiration?

e) What is formed as a result of electrons joining it?

f) Why must we have oxygen to live?