

# Respiration

1. Energy to convert glucose to hexose biphosphate in phosphorylation is provided by:
  - ☐ NAD
  - ☐ AMP
  - ☐ ADP
  - ☒ ATP
2. The stage of respiration in which glucose is converted to pyruvate is:
  - ☒ phosphorylation
  - ☐ the Krebs cycle
  - ☐ the electron transport chain
  - ☐ oxidative phosphorylation
3. The stage of respiration during which carbon dioxide is evolved is:
  - ☐ phosphorylation
  - ☒ the Krebs cycle
  - ☐ the electron transport chain
  - ☐ oxidative phosphorylation
4. The stage of respiration during which water is evolved is:
  - ☐ the Krebs cycle
  - ☐ phosphorylation
  - ☒ oxidative phosphorylation
  - ☐ the electron transport chain
5. The net number of ATP molecules produced when one molecule of glucose passes through the anaerobic stage of respiration is:
  - ☐ 3
  - ☐ 4
  - ☐ 1
  - ☒ 2
6. When one molecule of high energy NAD enters the electron transfer chain during oxidative phosphorylation, the number of ATP molecules formed is:
  - ☐ 4
  - ☒ 3
  - ☐ 1
  - ☐ 2
7. If one molecule of glucose is completely oxidised to  $\text{H}_2\text{O}$  and  $\text{CO}_2$ , a total of:
  - ☐ 32 molecules of ATP may be produced
  - ☐ 34 molecules of ATP may be produced
  - ☐ 36 molecules of ATP may be produced
  - ☒ 38 molecules of ATP may be produced
8. The Krebs cycle and oxidative phosphorylation take place in:
  - ☐ chloroplasts
  - ☐ cytoplasm
  - ☐ vacuole
  - ☒ mitochondria
9. Glycolysis takes place in:
  - ☐ chloroplasts
  - ☒ cytoplasm
  - ☐ vacuole
  - ☐ mitochondria

10. During anaerobic respiration in yeast, glucose is converted to:

- ☐ oxygen and water
- ☐ oxygen
- ☐ water and carbon dioxide
- ☒ ethanol and carbon dioxide