

## 5. AQA A2/Yr2 Biology - Respiration overview

1 (a) State two uses of ATP in cells. [2 marks]

---

---

---

(b) Explain how ATP is produced during aerobic respiration. [2 marks]

---

---

---

(c) Describe how anaerobic respiration in animals differs from anaerobic respiration in plants and yeast. [3 marks]

---

---

---

---

---

(d) Write the overall balanced chemical equation for aerobic respiration. [1 mark]

---

## 5. AQA A2/Yr2 Biology - Respiration overview

### Mark Scheme

- (a) Active transport; Muscle contraction / building large molecules / phosphorylation of molecules.
- (b) Energy released from glucose breakdown; Used to join ADP and Pi to form ATP by condensation.
- (c) Animals produce lactate; Plants and yeast produce ethanol and carbon dioxide; Both produce less ATP than aerobic respiration.
- (d)  $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$ .