

Full Higher Separate content. ★ = Higher Tier. ◆ = Separate Science only.

Q1. Explain the difference between continuous and discontinuous variation. State TWO causes of variation.

[3 marks]

Q2. Define mutation. Describe its importance for evolution.

[3 marks]

Total: 6 marks

Q1 (3 marks)

Explain the difference between continuous and discontinuous variation. State TWO causes of...

- Continuous: range (normal distribution), many genes + environment [1]
- Discontinuous: categories, usually one gene [1]
- Causes: genetic (mutations, meiosis, fertilisation) and environmental factors [1]

Q2 (3 marks)

Define mutation. Describe its importance for evolution.

- Mutation: a change in DNA base sequence [1]
- Mutations create new alleles — the only source of new genetic variation [1]
- New alleles provide the variation for natural selection to act on → evolution [1]