

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

Q1. Describe the process of selective breeding to produce high-yield dairy cows.

[3 marks]

Q2. Evaluate selective breeding as a method of improving crop plants.

[4 marks]

Total: 7 marks

Q1 (3 marks)

Describe the process of selective breeding to produce high-yield dairy cows.

- Select cows producing most milk [1]
- Breed these together; select highest-yielding offspring [1]
- Repeat over many generations [1]

Q2 (4 marks)

Evaluate selective breeding as a method of improving crop plants.

- Advantage: significantly improves yield, disease resistance [1]
- Advantage: well-established, no advanced technology needed [1]
- Disadvantage: reduces genetic diversity (gene pool narrowed) [1]
- Disadvantage: inbreeding increases disease/disorder risk in population [1]