

Solutions

Each answer shows the steps, then the **result**.

2.1

- discontinuous variation e.g. **ABO blood groups** (or seed shape)

2.2

- all new alleles come from **mutation**

3.1 C

- human height is affected by **both genes and the environment**
- A and B are only one cause; D is false

3.2

(a)

- a mutation is a **(random) genetic change** in the DNA base sequence

(b)

- **ionising radiation** (e.g. X-rays)
- **certain chemicals**