

Solutions

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

2.1

- natural selection: the **best-adapted** organisms survive, reproduce and **pass on their alleles**

2.2

- in selective breeding, **humans** select

3.1 B

- those **best adapted to the environment** are most likely to survive and reproduce
- A is not always true; C is selective breeding; D is asexual

3.2

(a)

- a few bacteria carry a **resistant allele** (by mutation)
- the antibiotic kills the non-resistant ones, so the resistant **survive**
- they reproduce and pass on the allele, so the **population becomes resistant**

(b)

- natural selection: the **environment** selects; selective breeding: **humans** select