

Solutions

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

2.1

- A group that can interbreed and produce fertile offspring

2.2

- The populations must become reproductively isolated (gene flow stops)

2.3

- Allopatric speciation

3.1 B

- reproductively isolated

3.2

(a)

- Allopatric speciation

(b)

- The barrier stops gene flow between the two groups; each accumulates different mutations and adaptations; eventually they diverge so much they can no longer interbreed — two species

3.3

- Populations in the same area can be isolated by differences in mating time, habitat, or behavior, so they stop interbreeding and diverge without a physical barrier