

Evolution

1. Which of the following statements is false?

- a) Evolution brings about permanent changes in living organisms. ☐
- b) Evolution is a very slow process. ☐
- c) Evolution enables species to adapt to changes in their environment. ☐
- d) Evolution produces species in which all individuals are identical. ☐

2. A species evolves in many stages. Arrange the following stages in chronological order to reflect the process of evolution.

- a) The members of a population within a species are not all identical.
- b) Selected traits are hereditary.
- c) There is a change in the environment.
- d) The species has adapted to its environment.
- e) Natural selection occurs.

3. In one example of evolution, giraffes with a small neck and short legs evolved into the giraffes we see today. Match each of the following descriptions with a stage of evolution referred to in question 2 (a, b, c, d or e).

- a) Since giraffes with a long neck and long legs stand a better chance of reproducing, they pass on these traits to their offspring. _____
- b) The climate changes and there is less grass. _____
- c) Giraffes that have a long neck and are tall can reach food more easily and are therefore healthier. Smaller giraffes gradually disappear. _____
- d) Some giraffes have a slightly longer neck than others and are a little taller. _____
- e) The giraffe population has changed. Taller giraffes have become a new species. _____

4. What evidence do scientists use for studying the origin and evolution of species?
