**5** **(a)** Organisms can be classified by their features and by studying the sequence of bases in their DNA.

Fig. 5.1 is a diagram showing the evolutionary relationships between some different groups of organisms.

Each branch shows the point at which organisms developed new features that classify them as a new group.

The point where the branch starts also indicates a common ancestor shared by the new groups.

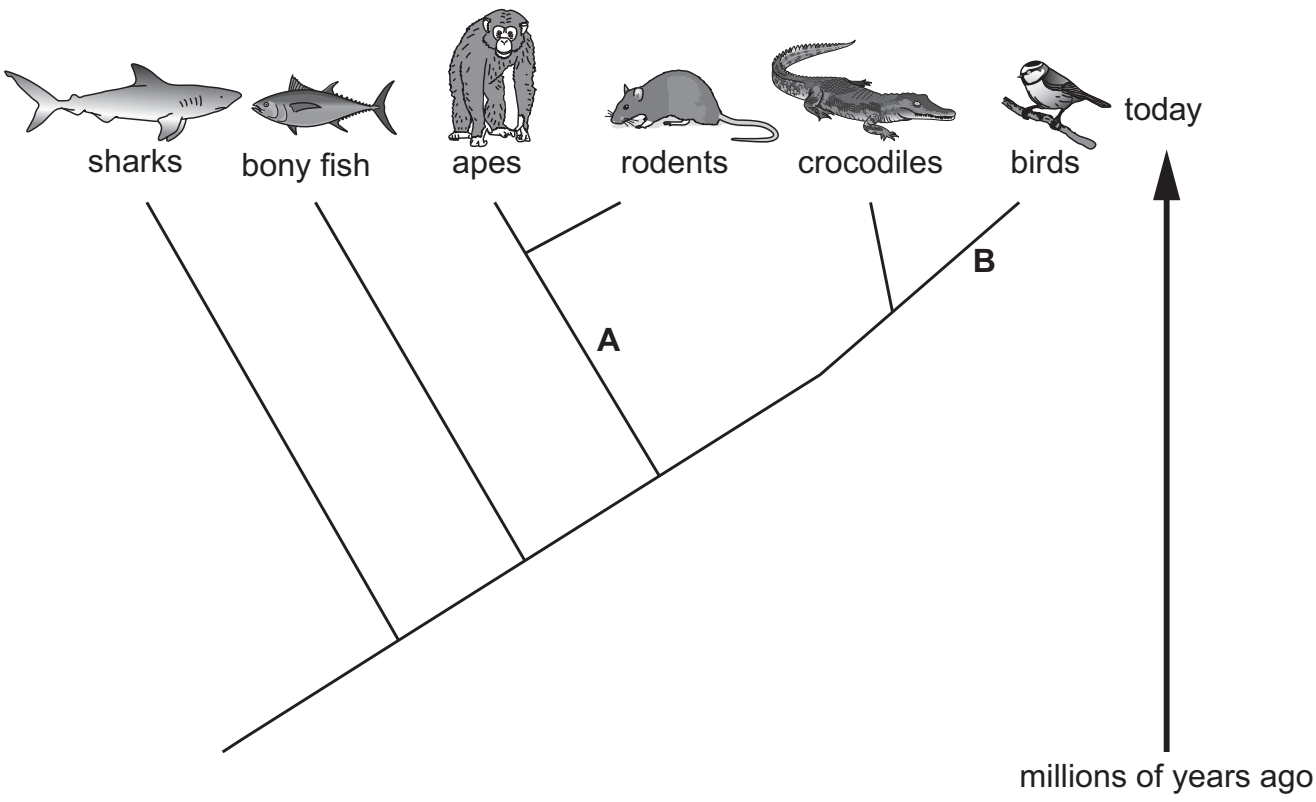


**Fig. 5.1**

**(i)** Suggest which visible features have developed at **A** and **B** in Fig. 5.1.

**A** .....

**B** .....
[2]

**(ii)** Identify the names of the **two** groups that share the most recent common ancestor in Fig. 5.1.

..... and ..... [1]

**(iii)** Suggest the groups with the most similar and least similar DNA base sequences to crocodiles in Fig. 5.1.

most similar .....

least similar .....
[2]

**(b)** Describe the structure of a DNA molecule.

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..... [4]

**(c)** Outline how the base sequences in DNA control cell function.

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..... [3]

[Total: 12]