

Chapter 4: Evolution

EXERCISES [PAGE 18]

Exercises | Q 1. (a) | Page 18

Fill in the blank.

The first systematic explanation of the concept of evolution was given by

_____.

1. **Charles Darwin**
2. Willard Libby
3. Louis Leakey

SOLUTION

The first systematic explanation of the concept of evolution was given by **Charles Darwin.**

Exercises | Q 1. (b) | Page 18

Fill in the blank.

_____ are the most evolved animals among vertebrates

1. Aquatic animals
2. Amphibians
3. **Mammals**

SOLUTION

Mammals are the most evolved animals among vertebrates

Exercises | Q 2. (a) | Page 18

Answer the question in one sentence.

What do we call animals which live in water and also on land?

SOLUTION

Amphibians live in water and also on land.

Exercises | Q 2. (b) | Page 18

Answer the question in one sentence.

Where did the first humans appear?

SOLUTION

The first human appeared on the African continent.

Exercises | Q 3. (a) | Page 18

Give reasons for the following:

The species of dinosaurs, which were enormous in size, suddenly became extinct.

SOLUTION

The species of dinosaurs, which were enormous in size, suddenly became extinct, because -

1. According to Darwin, the species that cannot adapt to environmental changes become extinct in the process of evolution.
2. Some sudden natural disaster or environmental change is believed to be responsible for the extinction of enormous dinosaurs.

Exercises | Q 3. (b) | Page 18

Give reasons for the following:

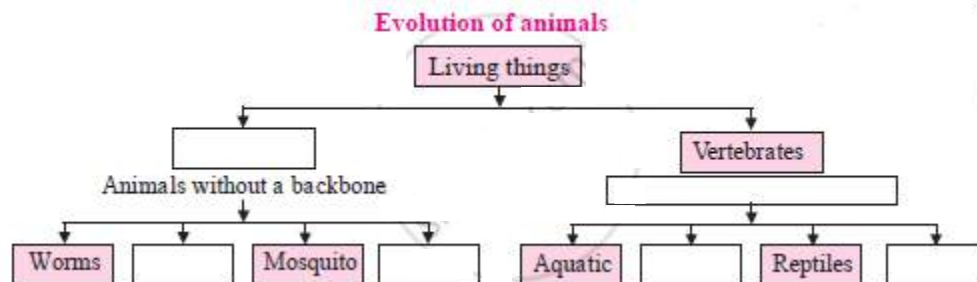
In the course of time, a new species with characteristics different from the original species is created.

SOLUTION

1. In the process of survival by adapting to environmental changes, certain internal physical changes occur in some species of animals.
2. Over a period of time, these changes become inherited characteristics seen in all subsequent generations. Thus, in the course of time, a new species with characteristics different from the original species is created.

Exercises | Q 4 | Page 18

Fill in the blanks in the concept chart given below.



SOLUTION

Evolution of animals

Living things	
↓	
↓	↓
<u>Invertebrates</u>	Vertebrates
Animals without a backbone	<u>Animals with a backbone</u>

↓				↓			
↓	↓	↓	↓	↓	↓	↓	↓
Worms	<u>Snail</u>	Mosquito	<u>Earthworm</u>	Aquatic	<u>Amphibians</u>	Reptiles	<u>Mammals</u>