



Subject: Grade 5 Natural Sciences

Topic: Skeletons of vertebrates

Total: 36 Marks

1. C | shoulder blades 4 marks

Explanation:

The skeleton of vertebrates is very similar to each other. You can identify the skull, spine (backbone), ribs, etc. They serve the same purpose in animals as they do in humans.

2. C: Skull 4 marks

Explanation:

The brain is in your skull. The skull is made up of 5 layers that all play a role in protecting the brain from serious injury.

3. B: Dog 4 marks

Explanation:

The dog is a vertebrate. It has its skeleton on the inside of its body.

4. organs | organs. 3 marks

Explanation:

The thorax (sternum, ribs and spine) protects the heart, lungs and other viscera (organs within the thorax).

5. skeleton | bones | joints 6 marks

Explanation:

Vertebrates skeletons are made up of bones and joints. This is not present in invertebrates because they have outer shells as their protection.

6. false 2 marks

Explanation:

Birds have limbs, labelled E and G - the wings and the legs.
In birds, the fore limbs are modified for flight and that is what we generally refer to as wings.
The hind limbs are modified for walking, perching or swimming.

7. C: B, C and E

4 marks

Explanation:

The frog, cat and kangaroo have limbs.

A frog's two front legs have four toes each, while the back legs have five toes each.

Unlike most mammals, when cats walk, they use a "pacing" gait; that is, they move the two legs on one side of the body before the legs on the other side. This trait is shared with camels and giraffes.

The kangaroo has a third leg masquerading as a tail.

8. spinal cord

3 marks

Explanation:

The spinal cord connects the brain with the rest of the body. If the spinal cord is damaged, the brain cannot send signals to the legs to walk. You are then considered 'paralysed'.

9. reptile | they all have a hard internal skeleton or backbone

4 marks

Explanation:

Mammals, fish, amphibians and reptiles are all vertebrates.

Most of these animals have legs, but snakes and fish do not have a legs.

10. false

2 marks

Explanation:

All birds are vertebrates because their backbone is inside their bodies. However, not all vertebrates are birds - they can be fish, mammals, reptiles and amphibians

Total: 36 Marks