

Subject:-science.

Class. - V

Chapter - 7

The Skeletal and Muscular Systems

Q1 Answer these questions :

1. What are the functions of the skeleton ?

Ans. The skeleton has several important functions.

* It provides support and the basic shape to the body to the body. Without skeleton , the body would be a shapeless heap of tissues.

* It protects the soft organs of the body .The skull protects the brain and the ribs protect the heart and lungs.

* Muscles are attached to the bones. Muscles and bones work together to move the parts of the body.

* Bones also contain bone marrow , a fatty substance which forms blood.

Q 2 Name the different parts of the skeletal system ?

Ans The different part of the Skeletal system are given below -

1. Skull

2. Collar Bone

3. Shoulder Bone

4. Stemum

5. Ribs

6.Spine

7. Hip Bone

8. Thigh Bone

9. Shin Bone

10. Calf bone

11. Toes

Q 3 what are joints ? Describe different type of movable joints in the body giving one example of each type.

Ans The place where two bones meet is called a joint .

Movable joints allow full movement of bones. These are four types of movable joints.

Hinge joint - A hinge joint is very strong but it allows only back and forth movement. Hinge joints are found in fingers , elbows , knees , toes

Pivot joint - This joint is found between the skull and the first two vertebrae of the spine .

Ball and Socket joint - The ball and Socket joint is found in the hip and shoulder . That is why you can move your legs and arms in almost all directions.

Gliding joint - These joint allows movement between the connecting bones. These are found in wrists , ankles , and also between any two vertebrae of the spine.

Q 4 Explain the types of muscles in your body with two examples of each type.

Ans The muscular system consists of three types of muscles.

1. Voluntary muscles

The muscles in our our body whose actions are under our control , are called Voluntary muscles.

Examples of Voluntary muscles are - eating , bathing

2. Involuntary muscles - The muscles in our body whose actions are not under our control , are called involuntary muscles. They work automatically . Our blood vessels , stomach , food pipe and intestine are some parts with involuntary muscles.

3. Cardiac muscles - cardiac muscles are the muscles of the heart . They work all our life pumping blood throughout the body without getting tired.

Q 5 Differentiate between voluntary and involunrary muscles .

Ans The muscles in our body whose actions are under our control , are called Voluntary muscles .

The muscles in our body whose actions are not under our control , are called involuntary muscles .They work automatically .our blood vessels , stomach , food pipe , and intestine are some parts with involuntary muscles.

B. Fill in the blanks

1. The two minerals in a bone are calcium and phosphorus
2. The skull is made up of eight flat bones.
3. sternum is a long bone , at the centre of the chest , holds the ribs in place.
4. Out of 33 vertebrae , the first seven are present in the neck region.
5. The largest bone in our body is femur
6. The hind limbs are attached to the pelvic girdles.
7. There are about 640 muscles in our body.

-

C. True or false

1. All bones in the skull are movable - **false**
2. White blood cells get destroyed while fighting germs - **true**
3. The muscular system controls all the functions of the body - **false**
4. Floating ribs are not joined to the breastbone - **true**
5. Muscles can pull or push a bone to make it move - **true**
6. Blood cells are formed inside the bone - **true**

D. Define the following

1. Skeleton - Our body has a number of soft parts. It is necessary to have a hard framework supporting these parts , otherwise the body will collapse. This framework is provided by the bones and is called the ' skeleton'
2. Floating ribs - The last two pairs of ribs are not attached to the sternum , and so are called floating ribs. But these ribs don't float around inside your body ! They are attached to your backbone. You can feel your ribs by running your fingers across your chest.
- 3 Ligament - strong band of tissue holding two bones together at a joint.
4. Joint - The place where two bones meet is called joint.
5. Tendon - strong fibres with which muscles are attached to the bones

E. Match the coloums :

- 1 Upper part of the skull - 8 bones
2. Ribcage - 12 pairs of bones
3. Backbone. - 33 bones
4. Face - 14 bones
5. Lower arm - 2 bones

F. Tick the correct answer :

1. Bones are made up of :

Ans calcium and phosphorus

2. The largest bone in our body is

Ans femur

3. Number of bones in our body is :

Ans 206

4. Cranium protect

Ans brain

5. Muscles are attached to the bones by :

Ans tendons

6. These muscles are found only in the heart :

Ans cardiac muscles

-

-

-