

Chid - Human skeletal System
V - G. Science

Saathi

Date ___/___/___

A. Tick (✓) the correct answers.

1. Hip and shoulder joint are example of
(b) ball-and-socket joint
2. Muscles are attached to the bones by strong fibres called
(a) tendons
3. Movements of the human body are produced by the contraction and relaxation of
(d) muscles.
4. Another name of backbone is
(b) vertebral column
5. A place where two or more bones meet is called a
(a) joint

B. Fill in the blanks with the correct word.

1. The skull covers and protects the brain.
2. The vertebrae protect the spinal cord.
3. Bones are held together by strong tissues called ligaments.
4. A pivot joints allows the movement of the head from side to side.
5. We have three kinds of muscles in our body.

C. Name the following:

1. The joint in the knee and elbow. Hinge joint
2. The largest thigh bone. Femur
3. The muscle in our heart. Cardiac muscle.
4. The tissue by which bones are held together.
Ligaments.

D. Answer the following questions:

1. What are the functions of the skeleton?
⇒ The functions of the skeleton are:
(i) to give form, shape and support to our body.

- ii) to protect the internal organs such as brain, lungs and hearts.
- iii) to move different body parts with the help of muscles.

2. What is a joint? Write three examples of movable joints in our body.

⇒ A place where two or more bones meet is called a joint.

The three examples of movable joints

are:

- i) The joint found in wrist and ankles (Gliding joint)
- ii) The joints found in elbows, knees and fingers, toes (Hinge joint)
- iii) The joint found between skull and backbone. (pivot joint)

3. How do muscles work? Write differences between voluntary and involuntary muscles.

⇒ Muscles are attached to bones by tendons and help them to move.

When a muscle contracts, it gets shorter and so pulls on the bone it is attached to. When a muscle relaxes, it goes back to its normal size.

Muscles can only pull and cannot push. Therefore have to work in pairs to move a joint. Hence two muscles are required to move a bone in one direction.

Voluntary muscles

i) These muscles are under our control

ii) These muscles are also called as skeletal muscles.

eg. - Muscles present in our hands, legs and arms.

Involuntary muscles

i) These muscles are not under our control.

ii) Most of these muscles are called as smooth muscles.

eg. - Stomach muscle.

4. What is posture? List importance of good posture and exercises.

⇒ Posture is the position our body when we sit, stand or walk.

Importance of good posture are:

- i) It gives graceful appearance to our body.
- ii) It keeps our body in proper shape and helps us stay healthy and makes us look smart.

Importance of exercises are:

- i) It helps to keep our muscles in good tone.
- ii) It helps to keep the bones strong and helps the lungs, heart and blood vessels to function properly.

E. Give reasons for the following:

1. We cannot move our bones without muscles.

⇒ We cannot move our bones without muscles because muscles can contract and relax and help them to move.

Muscles can only pull a bone. They cannot push. Hence two

muscles are required to move a bone in one direction,

2. The rib bones are curved and form a cage like structure.

⇒ The rib bones are curved and form an cage like structure to protect the two vital organs our body such as heart and lungs.

3. We should always sit and stand straight and walk upright.

⇒ We should always sit and stand straight and walk upright to maintain a good posture. A good posture gives graceful appearance to our body and also helps us to stay healthy and makes us look smart.

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'F' and 'G' → H/W [Page-30]

H/W try to support the questions / answers with diagram.

Note: Read & learn 'Let's Recall' (from page-28); Key words and Let's Revise (from page-28) — given at the end of chapters for definitions / one word / differences etc.

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