



# Grade 6. The Body and It's Movement

### A. Tick the correct answer

- 1.In which of these organ systems do the males and females have different organs?
- (a) nervous system.
- (b) muscular system
- (c) excretory system.
- (d) reproductive system
- 2. Which of these has the least number of movable joints?
- (a) skull.
- (b) backbone
- (c) arms and hands.
- (d) legs and feet
- 3. The hinge joints allow movement in
- (a) all directions.
- (b) one plane only.
- (c) two planes only. (d) depends on where the joint is located in the body.
- **4.**The bones at the joints are held together by
- (a) ligaments.
- (b) cartilage.
- (c) tendons.
- (d) bone marrow.
- **5.**Which of these acts as a shock absorber at the joints?
- (a) cartilage.
- (b) ligaments
- (c) tendons.
- (d) biceps
- **6.**A group of cells specialized to perform a specific task is known as a/an
- (a) tissue.
- (b) organ.
- (c) organ system.
- (d) organism.
- 7. Muscles in animals contract and expand for
- (a) digestion of food.
- (b) movement of body parts.
- (c) breathing.
- (d) all of these
- **8.**Which of these is not an organ system?
- (a) heart.
- (b) respiratory
- (c) digestive.
- (d) excretory
- 9. Joints are places where
- (a) two bones meet.

- (b) two muscles meet.
- (c) a bone and a muscle meet.
- (d) all of these
- **10.**Where is a hinge joint located in your body?
- (a) between the arm and the shoulder
- (b) between the upper and lower arms
- (c) between the leg and the hip
- (d) between the bones in the skull

#### **B. VERY SHORT ANSWER QUESTIONS.**

1. All living organisms are made up of a number of cells. false

- **2.** The main function of the <u>circulatory system</u> system is to transport nutrients, oxygen and waste.
- **3.**The teeth are a part of the <u>digestive</u> system.
- **4.**A child has more bone than an adult. <u>True</u>

**5.**Which part of the skeletal system is the brain protected by?

**Ans:** The brain is protected by a hard, bony structure called the skull.

**6.**How many movable bones does the skull have?

Ans: The skull have one movable bone i.e., the lower jaw bone.

**7.**Name two organs protected by the rib cage.

**Ans:** The rib cage protects the heart and the lungs.

**8.**Name the longest bone in the human body.

**Ans:**The longest bone in the human body is the thigh bone or femur.

**9.**The joints between the ribs and the breastbone allow slight movement. <u>True</u>

**10.**Name the group of muscles you use to lower your arm.

**Ans:**The group of muscles used to lower the arm is called the triceps.

**11.**Muscles move the bones by pulling and pushing them. <u>false</u>?**12.**Worms do not have bones. True

13. What kind of skeleton does a cockroach have?

**Ans:**A cockroach has an exoskeleton.

14. Which fin of the fish helps it to move?

**Ans:**The tail fin of the fish helps it to move.

**15.**What is the shape that fish, birds, airplanes and ships have that reduces air/water resistance?

**Ans:**The fish, birds, airplanes and ships have a streamlined body shape - rounded in front and narrow at the back. This reduces the air / water resistance.

**16.**What is the name given to animals with backbone?

**Ans:**The animals with backbone are called vertebrates.

#### C. Short Answer Questions.

**1.**What is a tissue? Give two examples.

**Ans:**A group of cells that performs a special job together is known as a tissue. Blood and bone are two examples of tissue.

**2.**Name the main organs in the digestive system. What is the main function of this system?

**Ans:**The main organs of the digestive system are teeth, food pipe, stomach, small intestine and large intestine. The digestive system of the body helps to digest and absorb the nutrients from food that are necessary for the growth and maintenance of the body.

3. What is bone marrow? What is its main function?

**Ans:**The soft spongy material found within long bones such as the femur is known as the bone marrow. Its main function is to produce new blood cells to replace ones that are damaged and worn out.

**4.**What are the functions of the spine?

**Ans:**The spine, or the backbone, is the supporting structure for the entire skeleton and it also protects the spinal cord.

**5.**Why are at least two muscles needed to move a bone at a joint in one direction? Muscles can contract and pull on the bones, but they cannot push. Therefore, at least two muscles are needed. When one contracts, the other extends and vice-versa to allow movement at a joint.

**6.**Name the three types of skeletons that living organisms have. Give one example of each.

**Ans:**Living organisms have three type of skeletons:

- 1. Endoskeleton: Example- skeletons in human beings.
- 2. Exoskeleton : Example- snails.
- 3. Liquid skeletons: Example- Earthworms.

7. List two adaptations in birds that help them to fly.

Ans:Birds have very strong muscles to help them fly. Further, they have hollow bones that reduces weight and makes flight easier.

## **D. Long Answer Question**

**1.**What is an organ system? Name three organ systems in the human body and their main functions.

**Ans:**A group of organs working together to carry out life functions is an organ system. Following are the three organs system in the human body:

- (i) Circulatory system: Its main function is to transport nutrients, oxygen and waste to all parts of the body.
- (ii) Nervous system: Its main function is to control all the functions of the body.
- (iii) Respiratory system: Its main function is to take oxygen inside the body and to expel carbon dioxide from the body.
- 2. How do the following move? a. earthworm b. snake c. fish

**Ans:**(a) To move, the earth worm first extends the front part of its body, keeping the rear part fixed to the ground and shortens it, thus pulling the rear end forward. It carries out expansion and contraction of muscles repeatedly to move forward.

- (b) A snake has a long, flexible back bone, which helps the snake to curve its body into many loops. Each loop pushes against the ground to propel the snake forward.
- (c) A fish moves with the help of muscles that are found on either side of the backbone. These muscles contract on one side and expand on the other. This moves the body of a fish from side to side, in a zigzag pattern.
- **3.**Explain the structure of the ball and socket joint. Give two examples of such joints in the human body. What kind of movement does such a joint allow?

**Ans:**A ball and socket joint allows movement in all directions. In such joints, the end of one of the bones is round like a ball. It fits into a hollow part (or socket) in the other bone. The bone that ends in a ball, can move in any direction. Examples: Shoulder and hip joints.

**4.**List the main functions of the human skeleton.

**Ans:**The skeleton has following four main functions:

- 1. Support: Our skeleton provides a hard framework to support the organs of body.
- 2. Protection: The bones protect the soft organs in our body.
- 3. Movement: They help in the movement of the body.
- 4. Making blood cells: The inside of bones contains a soft substance, called bone marrow, where the blood cells are made.

5. What is a joint? How can you classify joints on the basis of the movement they allow?

**Ans:**A joint in the body is a place where two bones are joined together. A joint is strong enough to withstand jerks. The bones are held together at the joints by strong, elastic bands called ligaments.

The joints can be classified into following three types depending on the type of movement they allow:

- (a) immovable,
- (b) slightly movable, and
- (c) freely movable.
- **6.**What is the difference between endoskeleton and exoskeleton? Give three examples of each.

Endoskeleton	Exoskeleton
The skeleton is present inside the	The skeleton is present outside the
body.	body.
This skeleton is made up of bones.	This skeleton is not made up of
	bones.
Examples: Human beings, birds and	Examples: Snails, crabs and
reptiles.	cockroaches.