

Human Body and Health

Science · Class 5 · Topic-wise Practice Worksheet

TIME 40 minutes	QUESTIONS 18	TOTAL MARKS 24	MAX. SCORE ___ / 24
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Name: _____ Class/Sec: _____ Date: _____

INSTRUCTIONS

- There are **18 questions** in this worksheet. All questions are compulsory.
- Each question has four options (A), (B), (C) and (D). Exactly **one** option is correct.
- Questions 1–15 carry **1 mark** each. Questions 16–18 (Achievers Section) carry **3 marks** each.
- There is no negative marking. Do not use a calculator.
- Study every diagram and table carefully before answering.

Section A — Systems of the Body

Q1–Q7 · 1 mark each

- How many bones are there in the body of a normal adult human being?
 (A) 106 (B) 206
 (C) 306 (D) 406
- Which organ pumps blood to every part of the body?
 (A) Lung (B) Liver
 (C) Kidney (D) Heart
- The exchange of oxygen and carbon dioxide takes place in the _____.
 (A) Lungs (B) Stomach
 (C) Kidneys (D) Brain
- The longest and strongest bone in the human body is the _____.
 (A) Backbone (B) Rib
 (C) Thigh bone (femur) (D) Collar bone
- Which organ controls and coordinates all the activities of the body?
 (A) Heart (B) Skin
 (C) Liver (D) Brain
- The joint present at the elbow, which allows movement in only one direction, is a _____ joint.
 (A) Hinge (B) Ball and socket
 (C) Pivot (D) Fixed
- Which of these is **not** a sense organ?
 (A) Tongue (B) Skin
 (C) Liver (D) Nose

8. The figure shows an outline of the human digestive system. In which labelled part is **most of the digested food absorbed** into the blood?

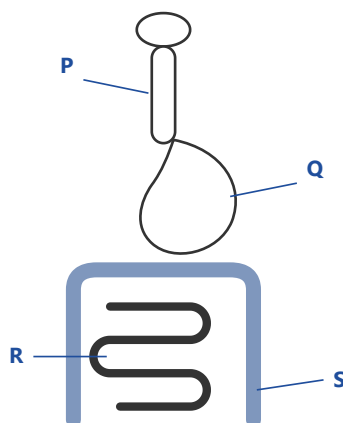


Fig. 8.1 — The human digestive system (S is the blue tube)

- (A) P (B) Q
(C) R (D) S
9. **Assertion (A):** The skull is made of hard bone.
Reason (R): The skeleton of an adult human being is made up of 206 bones.
Choose the correct option.
- (A) Both A and R are true, and R explains A (B) Both A and R are true, but R does not explain A
(C) A is true but R is false (D) A is false but R is true
10. The rib cage is best described as a bony cage that _____.
(A) Joins the arms to the shoulders (B) Protects the stomach only
(C) Helps the body stand upright (D) Protects the heart and the lungs
11. The component of blood that carries oxygen from the lungs to the rest of the body is the _____.
(A) Red blood cell (B) White blood cell
(C) Platelet (D) Plasma
12. In the table below, which row is **incorrectly** matched?

Row	Organ	System it belongs to
(A)	Lungs	Respiratory system
(B)	Kidney	Nervous system
(C)	Stomach	Digestive system
(D)	Heart	Circulatory system

Table 12.1 — Organs and body systems

- (A) Row (A) (B) Row (B)
(C) Row (C) (D) Row (D)
13. You can swing your arm right round in a circle, but you cannot do the same with your knee. This is because the shoulder has a _____ joint.
(A) Fixed (B) Hinge
(C) Ball and socket (D) Pivot

14. Which of the following actions is **involuntary**, that is, it happens without you deciding to do it?
- (A) Writing with a pen (B) Kicking a ball
(C) Climbing stairs (D) The beating of your heart
15. A child's diet contains almost no milk, eggs or green vegetables. Which deficiency disease is this child most likely to develop?
- (A) Rickets, causing weak and bent bones (B) Fever
(C) A broken bone (D) Toothache from eating sweets

Achievers Section

Q16–Q18 · 3 marks each

16. Consider the following statements about the human body.
- (i) Muscles can only pull; they cannot push.
(ii) The windpipe carries food to the stomach.
(iii) Bones are joined to one another at joints.
- Which of the statements is/are correct?
- (A) (i) and (ii) only (B) (i) and (iii) only
(C) (ii) and (iii) only (D) All three
17. Arrange the following in the correct order in which food passes through the digestive system.
- (i) Small intestine (ii) Mouth (iii) Large intestine (iv) Stomach (v) Food pipe
- (A) (ii) → (v) → (iv) → (i) → (iii) (B) (ii) → (iv) → (v) → (iii) → (i)
(C) (ii) → (v) → (i) → (iv) → (iii) (D) (ii) → (iv) → (i) → (v) → (iii)
18. Match each part in Column I with its correct function in Column II.

Column I	Column II
(P) Saliva	(1) Filters waste from the blood
(Q) Kidney	(2) Carries messages to and from the brain
(R) Nerve	(3) Begins the digestion of starch in the mouth
(S) Diaphragm	(4) Moves down to help air enter the lungs

Table 18.1

- (A) P-1, Q-3, R-4, S-2 (B) P-3, Q-1, R-2, S-4
(C) P-3, Q-2, R-1, S-4 (D) P-4, Q-1, R-2, S-3

Answer Key

1	B	2	D	3	A	4	C	5	D
6	A	7	C	8	C	9	B	10	D
11	A	12	B	13	C	14	D	15	A
16	B	17	A	18	B				

Solutions

1. Answer: (B) 206

An adult skeleton has 206 bones. A newborn baby actually has about 300, but many of these fuse together as the child grows.

2. Answer: (D) Heart

The heart is a muscular organ that keeps contracting and relaxing, pushing blood through the blood vessels to all parts of the body. It beats about 70–80 times a minute in a resting adult.

3. Answer: (A) Lungs

Air breathed in reaches tiny air sacs inside the lungs. There, oxygen passes into the blood and carbon dioxide passes out of the blood to be breathed out.

4. Answer: (C) Thigh bone (femur)

The femur, or thigh bone, is the longest and strongest single bone. It has to carry the whole weight of the body while walking and running. The backbone is not a single bone — it is a column of 33 small vertebrae.

5. Answer: (D) Brain

The brain is the control centre of the body. It receives messages from the sense organs through nerves, decides what to do, and sends instructions back to the muscles and organs.

6. Answer: (A) Hinge

A hinge joint works like the hinge of a door — it bends and straightens in one plane only. The elbow and the knee are hinge joints. The shoulder and hip are ball-and-socket joints, which move in all directions.

7. Answer: (C) Liver

The five sense organs are the eyes (sight), ears (hearing), nose (smell), tongue (taste) and skin (touch). The liver is a digestive gland, not a sense organ.

8. Answer: (C) R

R labels the small intestine — the long coiled tube where digestion is completed and the digested food is absorbed into the blood. P is the food pipe (oesophagus), Q is the stomach, and S is the large intestine, which mainly absorbs water from the undigested waste.

9. Answer: (B) Both A and R are true, but R does not explain A

Both statements are true — the skull really is made of hard bone, and an adult skeleton really does have 206 bones. But the *reason* the skull is hard is that it must protect the soft brain, not that the skeleton happens to contain 206 bones. R is a true fact that has nothing to do with A, so it does not explain it.

10. Answer: (D) Protects the heart and the lungs

The 12 pairs of ribs curve round from the backbone to the breastbone, forming a cage around the chest. This cage shields the heart and lungs and also moves up and down to help in breathing.

11. Answer: (A) Red blood cell

Red blood cells contain a red pigment called haemoglobin, which picks up oxygen in the lungs and releases it wherever the body needs it. White blood cells fight germs and platelets help blood to clot.

12. Answer: (B) Row (B)

The kidneys belong to the excretory system — they filter waste out of the blood and make urine. The nervous system is made up of the brain, spinal cord and nerves. The other three rows are matched correctly.

13. Answer: (C) Ball and socket

In a ball-and-socket joint the rounded head of one bone sits inside a cup-shaped hollow of another, allowing movement in every direction. The knee is a hinge joint, so it can only bend and straighten.

14. Answer: (D) The beating of your heart

Involuntary actions are controlled automatically and continue even while you sleep — the beating of the heart, breathing and digestion are examples. Writing, kicking and climbing are voluntary actions that you choose to perform.

15. Answer: (A) Rickets, causing weak and bent bones

Milk, eggs and green vegetables supply calcium and vitamin D, both of which are needed to make bones hard and strong. Without them a child develops rickets, in which the bones stay soft and the legs bend. Fever and fractures are not caused by a poor diet in this way.

16. Answer: (B) (i) and (iii) only

Statement (i) is true — a muscle works by contracting and pulling a bone, which is why muscles are arranged in pairs that pull in opposite directions. Statement (ii) is false; the windpipe carries **air** to the lungs, while the food pipe carries food to the stomach. Statement (iii) is true. Hence (i) and (iii).

17. Answer: (A) (ii) → (v) → (iv) → (i) → (iii)

Food is chewed and mixed with saliva in the mouth (ii), travels down the food pipe (v), is churned with digestive juices in the stomach (iv), is fully digested and absorbed in the small intestine (i), and finally the undigested waste passes into the large intestine (iii).

18. Answer: (B) P-3, Q-1, R-2, S-4

Saliva contains a juice that starts breaking down starch while food is still in the mouth (3). The kidney filters waste out of the blood (1). Nerves carry messages between the brain and the rest of the body (2). The diaphragm is the sheet of muscle below the lungs that flattens and moves down so that air rushes in (4). Hence P-3, Q-1, R-2, S-4.