

**SOIL EROSION AND CONSERVATION**

**I. Give one word for the following:**

1. Carrying away of soil by wind and water \_\_\_\_\_
2. Cutting down trees in large numbers \_\_\_\_\_
3. Protecting soil from erosion \_\_\_\_\_
4. Structures along river banks to prevent soil erosion \_\_\_\_\_
5. Planting trees in large numbers \_\_\_\_\_
6. The process by which rocks are broken down \_\_\_\_\_
7. The most fertile layer of soil \_\_\_\_\_
8. A farming practice adopted in hilly areas to stop erosion  
\_\_\_\_\_

**II Fill in the blanks:**

1. Plants remove all the nutrients from \_\_\_\_\_.
2. In deserts and open lands, \_\_\_\_\_ causes soil erosion.
3. The \_\_\_\_\_ contains very less humus.
4. Terrace farming is done in the \_\_\_\_\_.
5. \_\_\_\_\_ act as windbreaks.

**III. State true or false:**

1. The bedrock contains less water -
2. Running water causes the least amount of soil erosion –
3. Ploughing of hills for cultivation reduces soil erosion –
4. Leaving the soil bare helps to conserve the soil –

#### **IV. Match the following:**

- |                        |                                      |
|------------------------|--------------------------------------|
| 1. Weathering of rocks | a) natural agents of soil erosion    |
| 2. Water and wind      | b) prevention of soil in hilly areas |
| 3. Terrace farming     | c) cutting of trees in large numbers |
| 4. Deforestation       | d) formation of soil                 |

#### **V. Answer the following questions:**

1. Differentiate between top soil and sub soil.
2. Write the importance of top soil.
3. How is soil erosion by water be stopped?
4. List the things that the soil contains?

#### **VI. Give reasons:**

1. The fertility of the soil is lost due to soil erosion.
2. Embankments are built near rivers.
3. Trees prevent soil erosion.

#### **VII. Answer in detail:**

1. Draw a well labelled diagram to show the layers of soil.
2. How is soil formed?
3. In what ways are humans responsible for soil erosion?
4. How do water and wind act as agents of soil erosion?

#### **VIII. Think and answer:**

Sahil lives in Darjeeling. He does farming there. What method should he use to prevent soil being eroded?

#### **IX. HOTS:**

1. Why is air an important part of soil?
  2. Terrace farming is also known as step farming? Why?
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## MATTER AND MATERIALS

### I. Answer the following in one word:

1. A substance that occupies space and has mass \_\_\_\_\_.
2. Building block of matter \_\_\_\_\_.
3. The state of matter in which particles move freely \_\_\_\_\_.
4. The space between two molecules \_\_\_\_\_.
5. An example of a liquid \_\_\_\_\_.

### II. Fill in the blanks:

1. \_\_\_\_\_ cannot be seen with the naked eye.
2. The particles of sand \_\_\_\_\_ and \_\_\_\_\_ do not dissolve in water.
3. \_\_\_\_\_ and \_\_\_\_\_ are two ways by which one state of matter can be changed into another.
4. Water and oil are \_\_\_\_\_ liquids.
5. Gases such as \_\_\_\_\_ and \_\_\_\_\_ dissolve in water.

### III. Write true or false:

1. Only living things are made up of matter-\_\_\_\_\_
2. Atoms are made up of molecules-\_\_\_\_\_
3. A molecule is the smallest unit of a substance-\_\_\_\_\_
4. A new substance is formed in a physical change-\_\_\_\_\_
5. Most chemical changes are permanent-\_\_\_\_\_

### IV. Answer the following questions:

1. What is a matter? What is it made up of?
2. What is the difference between melting and freezing?

3. Give two examples of
  - (i) Solids that do not dissolve in water.
  - (ii) Gases that dissolve in water.
4. Give three characteristic features of a chemical change.

**V. Answer in detail:**

1. Why do solids have a fixed shape?
2. Why can liquids flow whereas solids cannot?
3. Why is carbon dioxide dissolved in water good for aquatic plants?
4. Write the properties of solids, liquids and gases.
5. Why do gases diffuse rapidly?

**VI. Think and answer:**

Radha took some water in a glass. She marked the level of the water. Then she dissolved two spoons of sugar in the water and checked the level again. She found that the level remained the same. Can you explain why this happened?

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## NATURAL DISASTERS

### I. Choose the correct answer:

1. The Earth's crust is made of many pieces called \_\_\_\_\_.  
a) plates                      b) faults                      c) aftershocks                      d) tsunamis
2. Which of the following cannot be caused by an earthquake?  
a) landslide                      b) tsunami                      c) cyclone                      d) flood
3. Which of the following is not a name for a storm?  
a) hurricane                      b) typhoon                      c) cyclone                      d) tsunami
4. \_\_\_\_\_ are built to prevent floods.  
a) bunds                      b) banks                      c) shores                      d) bridges
5. Which of these should the government do before a disaster?  
a) provide first aid                      b) provide emergency                      c) rescue people  
d) build evacuation centres

### II. Write true or false:

1. The layers of the earth under the plates are stationary- \_\_\_\_\_
2. When magma is below the Earth's surface it is called lava- \_\_\_\_\_
3. Tidal or storm waves are also called tsunamis- \_\_\_\_\_
4. Drought is caused by moisture in the air- \_\_\_\_\_

**III. Name the following:**

1. The actual point inside the Earth where an earthquake begins-  
\_\_\_\_\_.
2. Huge waves formed due to an earthquake occurring underwater -  
\_\_\_\_\_.
3. The instrument used to measure the intensity and duration of earthquakes-  
\_\_\_\_\_.
4. The region where the Earth's crust is weak and develops a crack-  
\_\_\_\_\_.
5. The natural disaster that occurs due to the lack of rainfall-  
\_\_\_\_\_.

**IV. Match the following:**

- |                      |                                      |
|----------------------|--------------------------------------|
| 1. Earthquake        | a) measuring magnitude of earthquake |
| 2. Focus             | b) disturbance of earth's interior   |
| 3. Richter scale     | c) tsunami                           |
| 4. Tectonic movement | d) underground origin of vibrations  |
| 5. Ocean waves       | e) Earth's movement                  |

**V. Fill in the blanks:**

1. The innermost layer of the Earth is called \_\_\_\_\_.
2. The magnitude of an earthquake is measured using  
\_\_\_\_\_.
3. Volcanoes that can erupt frequently are called \_\_\_\_\_ volcanoes.
4. Floods occur due to \_\_\_\_\_ water.
5. Hot molten rocks inside the Earth are called \_\_\_\_\_.

## **VI. Answer the questions:**

1. Define the following terms.
  - (i) Epicentre
  - (ii) Seismograph
  - (iii) Focus
  - (iv) Magma
2. Give two reasons why floods occur.
3. Why do earthquakes occur?
4. What is tsunami?

## **VII. Answer in detail:**

1. Give the measures that can be taken to prevent or reduce the effects of drought.
2. Explain how volcanoes are formed?
3. How is the intensity of an earthquake decided on a Richter scale?

## **VIII. HOTS**

Can an earthquake cause a tsunami?

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## OUR SKELETAL AND MUSCULAR SYSTEM

### I. Choose the correct answer:

1. Which type of muscles are found in our heart? \_\_\_\_\_  
a) cardiac            b) striated            c) smooth            d) None of these
2. How many bones make up the skull? \_\_\_\_\_  
a) 29                    b) 25                    c) 21                    d) 22
3. What type of a joint is found in our fingers? \_\_\_\_\_  
a) Ball and socket    b) Hinge            c) Pivot            d) Gliding
4. The joints in the skull are called \_\_\_\_\_ joints.  
a) movable    b) voluntary    c) Immovable    d) Involuntary
5. Muscles are attached to the bones by \_\_\_\_\_.  
a) ligaments    b) tendons    c) movable joints    d) Immovable joints

### II. Fill in the blanks:

1. \_\_\_\_\_ protects the soft internal organs of our body.
2. The \_\_\_\_\_ joint helps to move the head.
3. In front, ribs are connected to the \_\_\_\_\_.
4. Most of the joints in the skull are \_\_\_\_\_.
5. Our wrist and ankles have \_\_\_\_\_ joints.

### **III. Match the following”**

- |                   |                             |
|-------------------|-----------------------------|
| 1. Skull          | a) protects lungs and heart |
| 2. Backbone       | b) produces new blood cells |
| 3. Ribcage        | c) ball and socket joints   |
| 4. Bone marrow    | d) protects brain           |
| 5. Shoulder bones | e) protects spinal cord     |

### **IV. Name these:**

1. This system gives the body its shape-\_\_\_\_\_
2. The inside portion of a bone where blood cells are made-  
\_\_\_\_\_
3. The small bones that make up the spine-\_\_\_\_\_
4. The biggest bone of the body -\_\_\_\_\_
5. Tissues which hold bones together at joints-\_\_\_\_\_
6. The type of joint by which the skull is connected to the tor vertebrae-  
\_\_\_\_\_
7. The strong fibres that attached muscles to the bones-  
\_\_\_\_\_
8. The muscles that shortens if you want to lower your arm-  
\_\_\_\_\_
9. Muscles which work on their own , over which you have no control-  
\_\_\_\_\_
- 10.The tiredless muscles that work throughout your life without stopping-  
\_\_\_\_\_

**V. Answer the following questions:**

1. What is an organ system?
2. What are joints? Name the types of joints in our body. Give an example of each type.
3. What are tendons?
4. What is an organ system?
5. Define the term bone marrow.

**VI. Give reasons:**

Voluntary muscles are also called striped muscles.

**VII. Answer the questions in detail:**

1. What function does the skeleton perform?
2. Describe the structure of the ribcage.
3. What is the difference between voluntary and involuntary muscles?
4. How do muscles work?

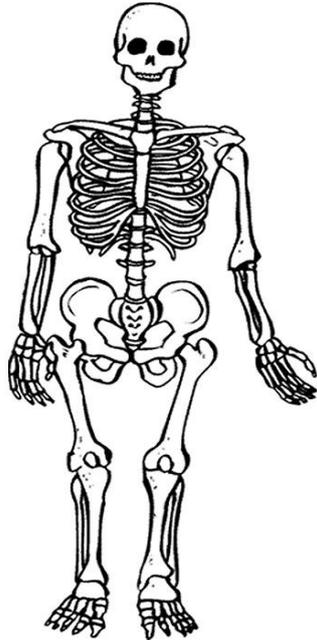
**VIII. Differentiate between**

- (i) Movable and immovable joints
- (ii) Cardiac muscles and skeletal muscles

**IX. HOTS:**

1. What would happen if we do not have any bones in our body?
2. What would be the result if our heart is made of voluntary muscles?

**X. Label the human skeletal system (any Six)**



**XI. Draw pelvic girdle with hind limb.**

