



# SHREE VASISHTHA VIDHYALAYA

Science Worksheet 2024-25



Name :- \_\_\_\_\_

Std.:- V - \_\_\_\_\_

Roll No :- \_\_\_\_\_

Worksheet - PA2 -01

Date :- \_\_\_\_\_

Chapter No. 8 soil Erosion and Conservation Chapter -10 volume weight and Density

## Q-1 Choose the correct option

- 1) Soil erosion can be increased by:
  - a) planting trees
  - ☒ b) cutting down trees
  - c) Growing grass
- 2) Cover crops are planted to
  - ☒ a) protect the soil from erosion
  - b) making soil dry
  - c) increase paste
- 3) Terrace farming is often done on
  - a) flat planes
  - ☒ b) mountain slope
  - c) Sandy beaches
- 4) If you pour water from a tall narrow glass into a wide shallow bowl , what happens to the water volume?
  - a) it increases
  - b) it decreases
  - ☒ c) it stays the same
- 5) If an object has a mass of 20 grams and a volume of  $4 \text{ cm}^3$  what is its density?
  - ☒ a)  $5 \text{ g/cm}^3$
  - b)  $8 \text{ g/cm}^3$
  - c)  $10 \text{ g/cm}^3$
- 6) What will happen to a solid object that is denser than water when placed in water?
  - a) it will float
  - ☒ b) it will sink
  - c) it will dissolve

## Q-2 Match the following.

(A)

(B)

Ans:-

- |                    |   |
|--------------------|---|
| 1) Humus           | a. Planting trees to prevent soil erosion |
| 2) Terrace farming | b. Natural decay of plants and animals    |
| 3) Afforestation   | c. Mass per unit volume                   |
| 4) Density         | d. Space occupied by an object            |
| 5) Volume          | e. Following on slopes in steps           |

1- b

2- e

3- a

4- c

5- d

## Q-4 Identify the following pictures.

1) 	2) 	3) 
Terrace farming	Afforestation	Deforestation

Q-3 State True or False.

- 1) Floating or sinking of an object depends upon its shape and density.
- 2) A measuring cylinder is used for measuring the weight of liquid.
- 3) Floods destroy crops and carry the top soil.
- 4) Different substances having the same volume may not have the same weight.
- 5) Milk is sold by weight.

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Q-5 Read the following two statements and choose the correct option.

- 1) Soil was formed due to the erosion of rocks by wind, rain and Sun.

Statement 2-Bunds prevent the water from carrying away valuable topsoil and destroying the crops.

- ☒ a) Both statement 1 and 2 are correct    b) Statement 1 is incorrect but statement 2 is correct  
c) Both statement 1 and 2 are incorrect    d) Statement 1 is correct but 2 is incorrect

2. Statement 1-We measure the weight of objects in grams or kilograms.

Statement 2-A Brick is less dense than a block of wood of the same size.

- a) Both statement 1 and 2 are correct    b) Statement 1 is incorrect but statement 2 is correct  
c) Both statement 1 and 2 are incorrect    ☒ d) Statement 1 is correct but 2 is incorrect

3. Statement 1-Both density and the shape of an object help it to float.

Statement 2-Density of an object can be found by multiplying its mass by its volume.

- a) Both statement 1 and 2 are correct    b) Statement 1 is incorrect but statement 2 is correct  
c) Both statement 1 and 2 are incorrect    ☒ d) Statement 1 is correct but 2 is incorrect

Q-6) Think and answer.

- 1) If you put a small piece of clay and a large balloon in water, which one will sink and which one will float? Why do you think so?

The clay will sink because it is denser and heavier than the water it displaces. The balloon will float because it is filled with air, making it less dense than water.

- 2) Location A has many trees and location B has lot of buildings with only one or two trees, which location will experience more soil erosion due to excessive rainfall? Why?

Location B will experience more soil erosion because it has fewer trees. Trees help to hold the soil together with their roots and reduce the force of rain hitting the ground. Without many trees the soil is more likely to wash away during heavy rainfall.