

1. Answer the following questions.

i. What is density? Write down its SI unit.

ii. What do you know about floating and sinking?

iii. Define the following terms.

- Liquid pressure
- Gas pressure
- Atmospheric pressure

Ans:

- Liquid pressure

- Gas pressure

- Atmospheric pressure

iv. What do you know about hydraulics?

v. Differentiate between balanced and unbalanced forces.

Balanced Forces	Unbalanced Forces

1. Long answer questions.

i. Explain the floating or sinking of objects.

ii. How can be measure pressure?

iii. What could a furniture maker do to reduce the pressure of the feet of a chair on the carpet?

iv. Why do a needle used for sewing have a sharp point?

- v. Why are dams built with the thicker wall at the bottom and thinner walls at the top?

2. Tick the right option.

1. SI unit of pressure is:

- I. Pascal II. Watt III. Joules IV. Newton

2. The instrument used to measure atmospheric pressure is:

- I. Hydrometer II. Barometer III. Stopwatch IV. Ammeter

3. The atmosphere extends _____ miles into space.

- I. 3200 II. 4200 III. 5200 IV. 6200

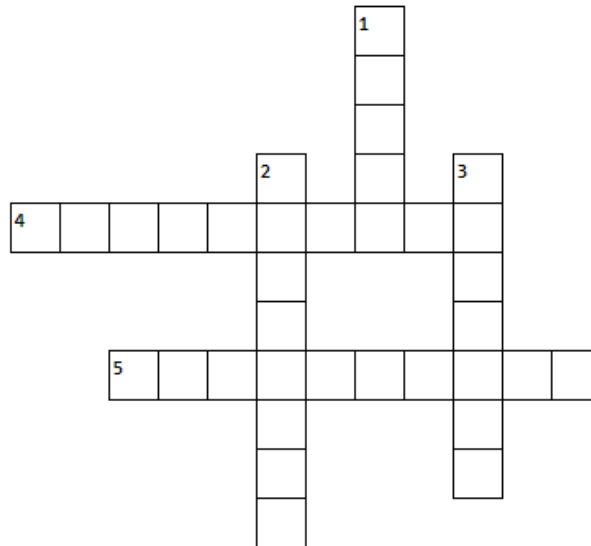
4. The ratio of mass and volume is called:

- I. Force II. Pressure III. Density IV. None

5. The density of water is:

- I. 1000 II. 1.3 III. 920 IV. 7900

3. Crosswords



Across

Down

4. Ocean of air

5. Transmit forces in liquid

1. Push or pull

2. Upward force

3. Mass by volume

4. Words Search

Find the following word in the words search.

Volume	Density	Liquid	Pressure	Float
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S	F	A	T	S	A	F	S	O	A
M	L	I	Q	U	I	D	P	N	L
V	N	P	Y	E	W	E	E	V	H
O	I	T	T	G	E	N	E	R	G
L	A	P	R	E	S	S	U	R	E
U	M	I	R	E	E	I	A	Z	T
M	V	F	L	O	A	T	N	P	U
E	G	S	L	I	Y	Y	W	D	S
G	F	O	R	C	E	B	R	L	Q

5. Jumbled Words

- i. INKS _____
- ii. MOSPHEREAT _____
- iii. UPRUSTHT _____
- iv. LPASAC _____
- v. FRECO _____

6. Columns

Match substances with their densities.

Substances		Densities (kgm ⁻³)
Iron	●	920
Glass	●	7900
Ice	●	2500
Air	●	1000
Water	●	1.3

7. Fill in the blanks using the given words.

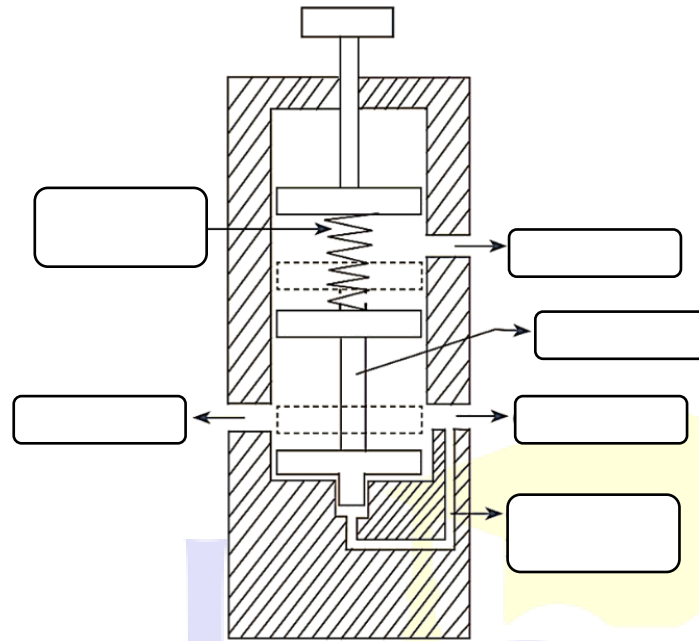
increases	greater	ocean	920	pressure
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- i. We live in the _____ of air.
- ii. Liquid pressure _____ with depth.
- iii. Density of ice is _____.
- iv. Force acting on unit area is _____.
- v. An object sinks if its weight is _____ than the upthrust.

8. Write “T” for the true and “F” for the false statement.

- i. Another name for upthrust is buoyant force.
- ii. Pressure at any depth in the liquid is different.
- iii. The gas molecules are in constant motion.
- iv. The unit of density is pascal.
- v. Pressure is inversely proportional to area.

9. Label the diagram.



10. Drag and Drop

Look at the pictures and write the names in the relevant column.

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11. Comprehension

Answer the following questions after reading the paragraph.

The pressure exerted by liquid is called liquid pressure. The liquid pressure at a point is due to weight of the liquid above it. The liquid at lower depth has to bear the entire weight of the water above it. Pressure at any depth in a liquid is the same. Liquid pressure increases with depth. Liquid pressure acts in all directions. The upward force acting on an object when placed in the fluid is known as Upthrust. It is also known as buoyant force. Upthrust is always equal to the weight of the fluid displaced by the object.

i. What is buoyant force?

ii. What are the important factors of liquid pressure?

iii. What is the reason of liquid pressure?
