



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 13.02.21

Duration: 40 min

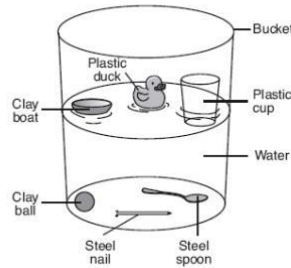
Worksheet Solution 09

Full Marks: 15

PHYSICAL QUANTITIES AND MEASUREMENT/ FLOATATION AND SINKING

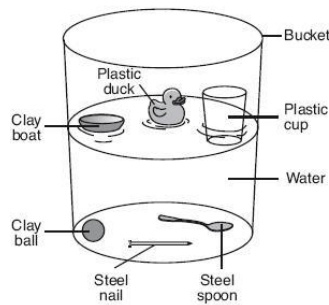
Choose the Correct options:

1. A group of students completed a float or sink experiment. They put six objects into a bucket of water. The objects were made of three different materials: clay, plastic, and steel. The diagram shows the results of the experiment.



Which material always sank in this experiment?

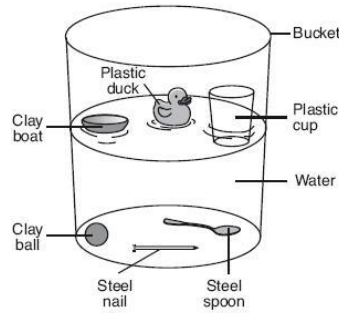
- A. clay
 - B. plastic
 - C. **steel**
 - D. None of these
2. A group of students completed a float or sink experiment. They put six objects into a bucket of water. The objects were made of three different materials: clay, plastic, and steel. The diagram shows the results of the experiment.



In the diagram, where is the duck located in relation to the spoon?

- A. below
- B. **above**
- C. under
- D. None of these

3. The clay boat and clay ball have the same mass. Which property causes the boat to float and the ball to sink?



- A. color
 B. mass
 C. **shape**
 D. None of these
4. Select the variables that effect if any object will float or sink. There will be more than one answer for this question. Choose all that apply.
- A. The amount of air inside an object
 B. The amount of surface area (shape)
 C. The density of the object
 D. **All of these**
5. A marble is dropped in a glass of water. Which force pulls the marble to the bottom of the glass?
- A. friction
 B. **gravity**
 C. magnetism
 D. None of these
6. When a rock is placed in a graduated cylinder containing water, the height of the water will
- A. **increase**
 B. decrease
 C. remain the same
 D. None of these
7. The force of water pushing back on an object is called _____.
- A. Weight
 B. **Buoyancy**
 C. Displacement
 D. None of these
8. When an object pushes out an amount of water equal to its volume it's called _____.
- A. Weight
 B. Buoyancy
 C. **Displacement**
 D. None of these
9. The amount of space an object takes up is called_____.
- A. Mass
 B. Density
 C. **Volume**
 D. None of these
10. The curve of upper surface of a liquid in a graduated cylinder is called the _____.
- A. **Meniscus**
 B. Mass
 C. Matter
 D. None of these

11. What is the upward force experienced by a body, when it is immersed in a fluid, known as?
- A. Tangential force
 - B. Buoyant force**
 - C. Centrifugal force
 - D. None of these
12. On which of these factors, the buoyancy depends?
- A. Density of the fluid
 - B. Volume of the body
 - C. Both a and b**
 - D. None of these
13. What happens to a body when its density is greater than the density of the fluid?
- A. it floats
 - B. it sinks**
 - C. it stays at rest
 - D. None of these
14. Which of the following is NOT an application of principle of floatation?
- A. Ships
 - B. Balloons
 - C. None of the above**
 - D. All of the above
15. What happens to a body when its density is equal to the density of the fluid?
- A. it floats
 - B. it sinks
 - C. it remains suspended**
 - D. None of these