



# ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 13.02.21

Duration: 40 min

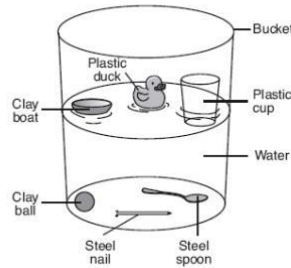
Worksheet 09

Full Marks: 15

## PHYSICAL QUANTITIES AND MEASUREMENT/ FLOATATION AND SINKING

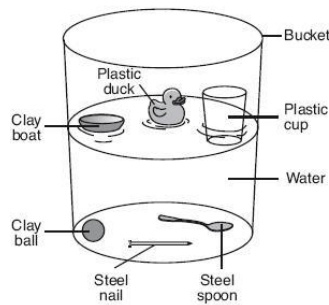
Choose the Correct options:

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?

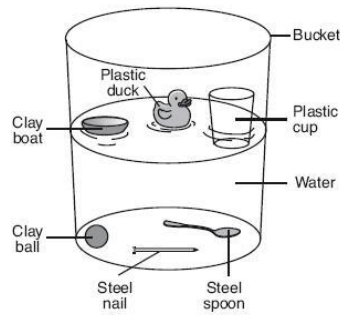
- A. clay
  - B. plastic
  - C. steel
  - D. None of these
2. A group of students completed a float or sink experiment. They put six objects into a bucket of water. The objects were made of three different materials: clay, plastic, and steel. The diagram shows the results of the experiment.



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