Group :

Members of Group :

**Student worksheet**

**“ DENSITY “**

1. **Purpose Experiment** : Students are able to determine the density of an object
2. **Tools and materials :**

1. objects

2. Balance ohaus

3. Measuring cup

**III. Basic theory**

 Density is a measurement of mass per unit volume of the object. The higher the density of an object, the greater the mass of each volume. The average density of each object is the total mass divided by the total volume. An object that has a higher density (such as iron) will have a lower volume than the same mass of objects which have a lower density (example water).

 Results for the masses by volume will produce a fixed number which is defined as the mass of the object.

Density = $ \frac{mass }{volume}$

Or by using the following symbols

$$ρ= \frac{m}{v}$$

 With, ρ is the density (density)

  m is the mass

   v is the volume

If the mass of the object is measured in kilograms, and the volume in m3, the unit of density is kg / m3. The density of pure water is 1 g / cm3 or equal to 1000 kg / m3

1. **Work steps** :
2. Weigh these objects one by one by using a balance ohaus
3. Measure the volume of the object with the measuring cup
4. Write the measurement of mass and volume of the object in a table
5. Use the density values in the above table as a reference for the measurement you
6. **Table Observations** :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Object  | Mass | Volume | Density  |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

1. **Conclution**  :

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