

1075 LOVU SANGAM SCHOOL
YEAR 7
BASIC SCIENCE
WORKSHEET – Home package 1

STRAND 2

SUB STRAND 2.1 **Investigating Matter**

CONTENT Organize and show solubility and density of solids and liquids in different liquids
LEARNING
OUTCOME

LESSON NOTES

STRUCTURE AND PROPERTIES OF MATTER

- Matter is regarded as anything that **occupies space and has mass**.
- **Mass** is the amount of material in a substance.
- The model that we use to explain matter is called a **particle model**. According to particle model, all matter is made up of particles.
- All the substances that we can feel. Smell or sea are examples of matter.
- All matter can be classified or grouped into solids, liquids and gases.
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States	Particle Model	Characteristics /Property
Solid	The particles in a solid are packed tightly in a fixed pattern. Particles cannot move out of position. They can only vibrate to and fro.	Have definite shape and volume. Cannot be compressed as particles are closely packed.
Liquid	The particles in a liquid can move about and slide past each other. They are still close together but not in a fixed pattern.	Liquids have definite volume but no fixed shape. Liquids take the shape of the container.
Gas	The particles in a gas are far apart and they move about freely. There are almost no forces holding them together.	A gas occupies a much larger volume filling up any space. It has no fixed shape and can be easily compressed.

Activity

Classify the following items into ***Solid, Liquid or Gas***

Water, Clothes, Soil, Kerosene, Water Vapour, Desk, Air, Milk, Tin

Soild	Liquid	Gas
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Properties of Matter

- ✚ Matter is recognized by their properties
- ✚ An object can be identified and classified according to its properties
- ✚ Common physical properties of matter which are clearly observed include colour, shape and size.

Others include strength, hardness, solubility, density, melting point and heat conductivity

SOLUBILITY

Salt is soluble in water meaning that salt can dissolve in water. However if you put several heaped teaspoonful of salt in a test tube half full of water, will all the salt dissolve.

The answer is that some salt will dissolve in water, but there is a limit to the amount you can dissolve.

This limit is called the solubility of the substance.

Activity

Identify whether the liquids listed below can mix together or no.

LIQUIDS	DO THEY MIX?
Water – kerosene	
Water – alcohol	
Oil – water	
Oil – alcohol	
Spirit – water	
Spirit – oil	