

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

STRAND	2
SUB STRAND	2.1 <b>Investigating Matter</b>
CONTENT LEARNING OUTCOME	Organize and show solubility and density of solids and liquids in different liquids

**Solutions**

**Activity**

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

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

<b>Soild</b>	<b>Liquid</b>	<b>Gas</b>
Clothes soil desk tin	Water kerosene milk	Water vapour air

**Activity**

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

<b>LIQUIDS</b>	<b>DO THEY MIX?</b>
Water – kerosene	<b>No</b>
Water – alcohol	<b>Yes</b>
Oil – water	<b>No</b>
Oil – alcohol	<b>No</b>
Spirit – water	<b>Yes</b>
Spirit – oil	<b>Yes</b>

- **Kerosene and water do not mixwith each other and form two separate layers.**

- **When you mix the rubbing alcohol with water, The alcohol dissolves in the water to form a homogenous solution, so you cannot distinguish the alcohol and the water anymore.**
- **oils do not mix with water. The reason is related to the properties of oil and water. Water molecules are made up of one oxygen atom and two hydrogen atoms.**
- **When you try to mix water and oil or alcohol and oil, the polar molecules stick together, keeping the oil molecules from getting between them-and the two don't mix.**
- **At the molecular level very little mixing of alcohol and water occurs in solution. They found that water molecules formed cluster structures, with hydrogen bonds serving as the glue that holds these clusters together.**
- **Oil and alcohol are miscible (can mix evenly). When a droplet of oil is dropped into a container filled with alcohol, it fully dissolves, implying that oil is miscible with alcohol.**