



Title	Competency	Learning Objectives
Matter	Solids and Liquids	<p>Identify some of the characteristics of solids</p> <p>Identify some of the characteristics of liquids</p> <p>Distinguish solids from liquids</p> <p>Apply the property of the free surface of a liquid</p>
	Volume	<p>Acknowledge that a liquid like a solid has a definite volume</p> <p>Acknowledge that the volume of the liquid displaced is equal to the volume of the immersed solid</p> <p>Acknowledge that the m^3 is the SI unit of volume</p> <p>Convert the m^3 to other commonly used units of volume</p> <p>Use the graduated cylinder</p> <p>Measure the volume of a solid and that of a liquid</p> <p>Calculate the volume of a solid of simple geometric shapes</p> <p>Estimate the volume of an object and express it in a convenient unit of volume</p>
	Mass and Density	<p>Acknowledge that mass is measured using a balance</p> <p>Acknowledge that the kg is the mass SI unit</p> <p>Convert between the kg and other commonly used units</p> <p>Use a balance</p> <p>Measure the mass of a solid and that of a liquid</p> <p>Calculate the density of a substance</p> <p>Estimate the mass of an object with the appropriate unit</p>
Title	Competency	Learning Objectives
	Gaseous State	<p>Recognize some characteristics of the gaseous state</p>

		<p>Define the term fluid</p> <p>Verify some characteristics of gases through experimental evidence</p> <p>Distinguish a gas from a solid and a liquid</p>
	<p>Gas Pressure SUSPENDED</p>	<p>Acknowledge that gases exerts pressure</p> <p>Acknowledge that the Pascal is the unit of pressure in SI</p> <p>Convert the Pascal into other commonly used units of pressure</p> <p>Use the barometer to measure atmospheric pressure.</p> <p>Use the manometer to measure the pressure of a confined gas.</p>
	<p>Constitution of Matter</p>	<p>Acknowledge that matter is made up of small particles in constant motion</p> <p>Acknowledge that between the particles of matter there are empty spaces</p> <p>Compare the distances between the particles of a matter in its different states</p> <p>Explain the phenomenon of diffusion</p> <p>Explain the incompressibility of solids and liquids</p>
	<p>Transfer of Heat</p>	<p>Acknowledge that heat is the energy exchanged between a body and its surroundings</p> <p>Acknowledge that the different ways of the transfer of heat</p> <p>Recognize the Celsius scale of temperature</p> <p>Acknowledge that heat changes the temperature of a body</p> <p>Use the thermometer correctly</p>
Title	Competency	Learning Objectives
	<p>Change of State</p>	<p>Acknowledge that heat may change the physical state of a body</p>

		<p>Define fusion, solidification, boiling and condensation</p> <p>Acknowledge that the change of state takes place at constant temperature</p> <p>Distinguish evaporation from boiling</p> <p>Acknowledge that the boiling point increases with pressure.</p> <p>Acknowledge that the change of state is accompanied by a variation in the volume</p> <p>Determine the melting point of ice and the boiling point of water.</p>
	Expansion	<p>Acknowledge that bodies expand differently according to their nature and their physical state</p> <p>Acknowledge that the pressure of a confined gas increases when heated</p> <p>Acknowledge how to graduate a thermometer</p>
Electricity	Electric Circuit	<p>Recognize the constituents of an incandescent lamp</p> <p>Acknowledge the characteristics of a dry cell</p> <p>Distinguish a conductor from an insulator</p> <p>Acknowledge the adaption of a dry cell to a lamp</p> <p>Build and draw a simple electric circuit</p>
	Electric Measurements	<p>Acknowledge that the current has a conventional direction</p> <p>Acknowledge that the glow of a lamp increases with the increase of the electric current passing through it</p> <p>Acknowledge that the ampere and the milli-ampere as units of an electric current</p> <p>Acknowledge how to measure the electric current in a circuit</p> <p>Acknowledge how to measure the voltage between two points in an electric circuit</p>
Title	Competency	Learning Objectives
	Grouping of Lamps and Cells	Acknowledge the laws of current and voltage in the grouping of lamps in series and in parallel

	SUSPENDED	<p>Acknowledge that the voltage resulting from the grouping of many cells in series is the sum of the individual voltages</p> <p>Build a circuit containing many lamps in series</p> <p>Build a circuit containing many lamps in parallel</p> <p>Acknowledge how to group some cells in series</p>
	Electric Safety SUSPENDED	<p>Acknowledge how to protect yourself from electrocution</p> <p>Acknowledge how to protect electric installations</p>
	Magnets SUSPENDED	<p>Recognize magnets and magnetic substances</p> <p>Acknowledge that Earth is considered a huge magnet</p> <p>Identify the poles of a magnet</p> <p>Acknowledge that the interactions between magnetic poles</p>
	Coils SUSPENDED	<p>Acknowledge that a coil carrying a current behaves like a magnet</p> <p>Acknowledge that the names of the two faces depend on the direction of the current</p> <p>Recognize the principle of an alternator</p> <p>Recognize the principle of an electric motor</p> <p>Construct an electromagnet</p> <p>Construct an electric motor</p>