

### Form 3 Term I Weekly Plan- 2025/26

Week 1	<b>Topic</b>	<b>Introduction to Chemistry Class and States of Matter</b>
	<b>Objectives</b>	Teacher introduces herself to the class. The teacher asks students to introduce themselves to the class. Ice breaker activity to interest students in science. Discuss class rules for Chemistry class. Give class schedule for Term 1.  Define matter. State the three states of matter, outline the particulate theories of matter, and compare properties relating to the states of matter ( <i>shape, volume, density, compressibility, arrangement, forces of attraction, energy, and movement of particles</i> )
	<b>Activities</b>	<i>Homework 1-compare solids, liquids and gases based on properties</i>
Week 2	<b>Topic</b>	<b>States of Matter</b>
	<b>Objectives</b>	State the different processes of changing states (melting, freezing, evaporation/boiling, sublimation, condensation, deposition). Explain changes in particles as heat is added or removed. State differences and similarities between evaporation and boiling.
	<b>Activities</b>	<i>Homework 2- Practice Questions</i>
Week 3	<b>Topic</b>	<b>States of Matter</b>
	<b>Objectives</b>	Define heating and cooling curves. Explain the process associated with conversion of one state of matter to another using the heating and cooling curve. Draw and label heating and cooling curve. Define boiling point, melting point, and freezing point. Answer questions related to the use of a heating or cooling curve.
	<b>Activities</b>	<i>Homework 3 and Classwork</i>
Week 4	<b>Topic</b>	<b>States of Matter</b>
	<b>Objectives</b>	State three processes that support the particulate theory of matter. Define and explain the processes of diffusion, osmosis, and Brownian motion. Pictorially represents the process of diffusion, osmosis, and Brownian motion. Explain the use of salt and sugar for garden pest control and food preservative.
	<b>Activities</b>	<i>Show diffusion of potassium manganate(VII) and formation of ammonium chloride</i>
Week 5	<b>Topic</b>	<b>States of Matter</b>
	<b>Objectives</b>	Revision of states of matter.
	<b>Activities</b>	<i>Exercise 1- Bring in examples of pure substances and mixtures for next class</i>
Week 6	<b>Topic</b>	<b>Pure Substances, Mixtures, and Separations</b>
	<b>Objectives</b>	Define pure substances. Define elements. Define compounds. Differentiate between the two types of pure substances. Give five examples of elements and compounds. Differentiate between classes of mixtures: homogeneous and heterogenous giving examples of each class of mixture. Define solution and give examples of different types of

		solutions. Distinguish between aqueous and non-aqueous solutions and saturated and super saturated solution.
	<b>Activities</b>	<i>Homework 4</i>
<b>Week 7</b>	<b>Topic</b>	<b>Pure Substances, Mixtures, and Separations</b>
	<b>Objectives</b>	Define suspension. Define colloids. Differentiate solutions, colloids, and suspension. State five examples of colloids. Define solubility. State units of solubility, mass, and temperature. Review parts of a graph. Construct solubility curve given required information. Answer questions using solubility curve.
	<b>Activities</b>	<i>Midterm Break assignment and online practice test</i>
<b>Week 8</b>	<b>MID-TERM ACTIVITIES</b>	
<b>Week 9</b>	<b>Topic</b>	<b>Pure Substances, Mixtures, and Separations</b>
	<b>Objectives</b>	Review construction of solubility curve and answering questions using solubility curve. States 7 methods of physical separation. Explain, draw annotated diagrams, and state examples for the process of filtration, evaporation, crystallization, simple distillation, fractional distillation, separating funnel, and paper chromatography.
	<b>Activities</b>	Demonstrate filtration, simple distillation, and paper chromatography. <i>Assignment 6- extraction of sucrose from sugar cane</i>
<b>Week 10</b>	<b>Topic</b>	<b>Pure Substances, Mixtures, and Separations</b>
	<b>Objectives</b>	Revision of Pure Substances, Mixtures, and Separations
	<b>Activities</b>	Exercise on Pure Substances, Mixtures, and Separations
<b>Week 11</b>	<b>Topic</b>	<b>Revision</b>
	<b>Objectives</b>	Revise topics of States of Matter and <b>Pure Substances, Mixtures, and Separations for upcoming Term I examinations.</b>

*\*Possible group work: Separation techniques*