

SCHEME OF WORK 2020 /2021

DEPARTMENT: Science

SUBJECT: Chemistry **FORM:** 3A,3S, 3J

TERM: I

TEACHER: Amanda Hosein-Boodhoo

WEEK	LEARNING OUTCOMES
1	States of Matter Students should be able to: Explain how evidence supports the particulate theory of matter. -Diffusion, Osmosis, Brownian Motion
2	States of Matter Students should be able to: -Distinguish among the three states of matter (Solids, liquids, gases) -Explain the arrangement of particles, energy of particles, strength of forces of interaction
3	States of Matter -Explain the changes between the three states of matter in terms of energy and arrangement of particles. Consideration of freezing, melting, boiling, evaporation, sublimation, condensation; heating and cooling curves.
4	Mixtures and their Separations -Identify different types of solutions -distinguish among solutions, suspensions and colloids .Reference to particle sizes, passage of light, sedimentation - Compare solutions, suspensions and colloids.

5	<p>Mixtures and their Separations</p> <p>-investigate the effect of temperature on solubility of solids in water (solubility curves)</p>
6	<p>Mixture and their separation</p> <p>-apply suitable separation techniques based on differences in properties of the components of mixtures.</p> <p>- Use of filtration, crystallization, centrifugation</p>
7	<p>Mixtures and their Separations</p> <p>-State the use of simple distillation, fractional distillation</p> <p>-Represent the apparatus used using line drawings.</p>

8	<p>Mixtures and their Separations</p> <p>– Use of solvent extraction, chromatography</p>
9	<p>Mixtures and their Separations</p> <p>-Describe the extraction of sucrose from sugar cane.</p> <p>-Explain the use of the following crushing, precipitation, filtration, vacuum distillation, crystallisation, centrifugation in the extraction.</p>
10	<p>Atomic Structure</p> <p>– Define atom, element</p> <p>-Parts of an atom and their properties</p> <p>-Arrangement of electrons in the atomic shells</p> <p>-Atomic structure of the first 20 elements in the periodic table</p>

11	Atomic Structure -Define isotopy, isotopes, atomic number, mass number, rel. atomic mass (RAM) -Uses of isotopes
12	Atomic Structure -interpret notations of the form $a_c X_b^d$ a – mass number; b – atomic number; c - charge; d - number of items in the entity; X – symbol of atom
13	Periodic table -Introduction: rows and columns; groups and periods -Arrangement in order of atomic number and electronic configuration