

INTEGRATED SCIENCE – FORM 1 SCHEME OF WORK – Term 3

WEEK	TOPIC	SYLLABUS OBJECTIVES	NUMBER OF SESSIONS	ACTIVITIES/LABS
1	Classification	<ol style="list-style-type: none"> 1. Definition of Classification 2. Recognize that each group can be further subdivided 3. Construct dichotomous key (number and spider key) 4. Discuss the importance if classification 	5	<ul style="list-style-type: none"> ✓ Identify groupings in everyday life ✓ Construct dichotomous keys
2	Structure and Properties of Matter	<ol style="list-style-type: none"> 1. Definition of matter 2. Recognize that matter exists in different states (solids, liquids and gases) 3. Demonstrate the arrangement of particles and how it gives rise to the general properties of solids, liquids and gases. 	5	<ul style="list-style-type: none"> ✓ Classify materials as solids, liquids and gases ✓ Measure the mass and volume of various materials ✓ Use models and draw diagrams to show arrangement of particles in solids, liquids and gases
3 - 4	Structure and Properties of matter	<ol style="list-style-type: none"> 1. Explain diffusion and osmosis in terms of particle movement 2. Explain how temperature causes changes in the states of matter 	10	<ul style="list-style-type: none"> ✓ Experiment demonstrating diffusion using potassium permanganate and water ✓ Demonstrate osmosis in potato strips using different concentrations of solution ✓ Investigate simple heating/cooling curves for ice and water
5	Structure and Properties of matter	<ol style="list-style-type: none"> 1. Describe the basis structure of the atom 2. Distinguish among electrons, protons and neutrons 3. Distinguish among elements, molecules, compounds and mixtures 	5	<ul style="list-style-type: none"> ✓ Draw and label the structure of the atom ✓ Classify a number of given substances as elements or compounds ✓ Classify substances as either mixtures or compounds

6 - 7	Structure and Properties of matter	<ol style="list-style-type: none"> 1. Distinguish between types of mixtures 2. Describe the formation of different types of solutions 3. Describe heterogeneous mixtures 	10	<ul style="list-style-type: none"> ✓ Explore different kinds of mixtures ✓ Prepare various types of solutions using different materials ✓ Make suspensions, colloids and mechanical mixtures ✓ Examine colloids and mechanical mixtures
8	Revision	<ol style="list-style-type: none"> 1. Review of the year's work 		