GRADE 8 GENERAL SCIENCE

CHRISTMAS TERM PLAN

2023-2024

TERM ONE: SEPTEMBER 7– DECEMBER 16 2023

		THEORY	LABS/QUIZ/TESTS
SEPTEMBER			
September 6-8	**WEEK 1** **1 Session** **55 minutes**	**INTRODUCTION** ● Welcome and introductions ● Term plan ● Rules and expectations for classes.	
September 11-15	**WEEK 2** **2 Sessions** **1 hr and 50 minutes**	**FORCES AND MOTION** **OBJECTIVES:** ● Distinguishing between vector and scalar quantities ● Recognizing balanced and unbalanced forces (Effects of balanced and unbalanced forces; Investigating forces involved in floating and sinking)	
September 18-22	**WEEK 3** **2 Sessions** **1 hr and 50 minutes**	FORCES AND MOTION OBJECTIVES: ● Use diagrams to show all forces acting on moving objects ● Investigating effects of streamlined shapes on motion ● Describing motion of an object using position,	**Coursework #1** Complete a worksheet which asks students to calculate resultant forces as well as balanced and unbalanced forces.

		direction and speed	
September 25-29	**WEEK 4** **2 Sessions** **1 hr and 50 minutes**	FORCES AND MOTION OBJECTIVES: ● Distinguish between displacement, distance, velocity, speed, and acceleration ● Solve problems with displacement, distance, velocity, speed and acceleration	**Assign a worksheet with formulas** that asks them to calculate displacement,distance,velocity,speed and acceleration. and use this to guide subsequent lessons
OCTOBER			
October 2-6 **Heritage Week**	**WEEK 5** **2 Sessions** **1 hr and 50 minutes**	**FORCES AND MOTION** **OBJECTIVES:** ● Solve problems with displacement, distance, velocity, speed and acceleration	
October 9-11	**WEEK 6** **2-Sessions** **1 hr and 50 minutes**	**WATER** ● Density of water including unit used (g/cm3). ● Include the calculations of the density of an object and when compared to the density of water will it float or sink.	**Coursework#2** **Assign a worksheet with formulas** that asks them to calculate the density of objects given the mass and volume.As well as questions asking them to calculate the mass and volume of irregular objects
Mid-term Oct. 12th - 16th Oct. 16 Heroes Day			
October 16-20	**WEEK 7** **2-Sessions** **1 hr and 50**	**WATER** ● Relate the difference in	

	minutes	density to the forces that allow objects to floats and give hypothetical values for these forces	
October 23-27	**WEEK 8** **2 Sessions** **1 hr and 50 minutes**	**Six Weekly Test**	**TEST 1– 2 Sessions** ● Forces and Motion ● Water in terms of calculating density and identifying whether objects float or sink
NOVEMBER			
October 30-3	**WEEK 9** **2 Sessions** **1 hr and 50 minutes**	**Water** ● review of water cycle.While reviewing the water cycle have the students identify the points at which the water may become polluted. ● Importance of water to plants and animals.	
November 6-10	**WEEK 10** **2 Sessions**	**Water**	

	1 hr and 50 minutes	● **Tests for water, conservation, purification of water**	
November 13-17	**WEEK 11** **2 Sessions** **1 hr and 50 minutes**	**PARTICULATE NATURE OF MATTER** ● The first 20 elements and their uses. ● Atoms	● Assign students to one element found in the Periodic Table and they should link where it is found in real life-giving details about the element in a summary video and posted in Google Classroom. **Course work #3** ● Learning by doing in class(Group work): ● Create models to depict the difference between elements and compounds using modeling clay.
November 20-24	**WEEK 12** **2 Sessions** **1 hr and 50 minutes**	**PARTICULATE NATURE OF MATTER** ● Definitions of elements and compounds ● Differences between elements, diatomic molecules and compounds ● Use water as an example and ask the students to identify the properties and uses of Hydrogen, Oxygen as well as that of water.	**Homework:** ● Use water as an example and ask the students to identify the properties and uses of Hydrogen, Oxygen as well as that of water.

		REVIEW AND RETURN TEST	
November 27- December 1	**WEEK 13** **2 Sessions**	**SUBATOMIC PARTICLES** ● Subatomic particles ● Mass number and atomic number ● Electronic configuration	**COURSEWORK 4** **LEARNING BY DOING** Use disposable plates in class and markers to create an atom. Allow students to display model during class, they will upload a picture of the atom to Google Classroom **LAB/PHET STIMULATION:** Have the students practice the construction of atoms using the atomic model simulation
DECEMBER			
December 4-8	**WEEK 14** **2 Sessions** **1 hr and 50 minutes**	**TEST 2**	**TEST 2:** ● **Periodic Table** ● **Atomic Structure**
December 11-19	**WEEK 15** **2 Sessions**	**PERIODS AND GROUPS** ● Properties of metals and non-metals ● Link electronic configuration with Group and Period Numbers **REVIEW AND RETURN TEST** END OF TERM	**COURSEWORK #5** Assign Quizlet activity for students to complete. **LAB/PHET STIMULATION:** Assign metals, non-metals and alloys to research and present on.
CHRISTMAS BREAK **December 19th- January 02nd**			