



Pakistan Urdu School- Kingdom of Bahrain

Curriculum Implementation Plan for GENERAL SCIENCE Grade VIII

No.	Month/ Week	Starting Date	Topics from Textbook or Others (Specify Unit Titles and Numbers)	National Curriculum References (Competency/ Standards / Themes)	Total Periods
1	April/ 1 WEEK and 2 days (7 days)	8-4-2018	Unit – 1: The Nervous System <ul style="list-style-type: none"> ▪ Nervous System (Central and Peripheral) ▪ Reflex Action ▪ Voluntary and Involuntary Actions 	Strand 1: Life Science Content Standard: Students will understand, explain and differentiate between the structure, characteristics, and basic needs of living things, the processes of life, and will also investigate the diversity of life and how the living things interact with each other and their environment.	8
2	April & May / 2 WEEKS (10 days)	22-4-2018	Unit-9 Scientists must measure <ul style="list-style-type: none"> ▪ Physical Quantities (Length, Volume, Mass, Time) ▪ System International Units (Meter, Liter, Kilogram, Second) ▪ Instruments for Measurements (Meter Rule, Measuring Cylinder, Flasks, Pipette) 	Strand 2: Physical Science Content Standard: Students will describe and explain common properties, forms and interactions of energy and matter including their transformations and applications in chemical, physical and biological systems.	12

3	May / 2 WEEKS (10 days)	6-5-2018	<p>Unit – 6 Chemical reactions</p> <ul style="list-style-type: none"> ▪ Chemical Reactions (Definition & Applications) ▪ Chemical Equation and Balancing ▪ Law of Conservation of Mass ▪ Types of Chemical Reactions ▪ Energy Changes in Chemical Reactions (Exothermic and Endothermic) ▪ Fermentation ▪ Oxidation of food ▪ Pollution from combustion 	<p>Strand 2: Physical Science Content Standard: Students will describe and explain common properties, forms and interactions of energy and matter including their transformations and applications in chemical, physical and biological systems.</p>	12
4	May / 2 WEEKS (10 days)	20-5-2018	<p>Unit-10 Heat and its effects</p> <ul style="list-style-type: none"> ▪ Sources and Effects of Heat ▪ Thermal Expansion and Contraction (Solids, Liquids and Gases) ▪ Applications of Expansion and Contraction of Solids (Riveting, Fixing a Metal tyre into Wheel , Fixing Axle of a Wheel, Fire Alarms and Electric Iron) 	<p>Strand 2: Physical Science Content Standard: Students will describe and explain common properties, forms and interactions of energy and matter including their transformations and applications in chemical, physical and biological systems.</p>	12

			<ul style="list-style-type: none"> ▪ Effects of Expansion and Contraction of Solids in Everyday Life (Concrete Road Surfaces, Railway Tracks, Bridges, Overhead Powers, Telephone Lines, Pipelines) ▪ Uses of Expansion and Contraction of Liquids ▪ Peculiar Behaviour of Water during Contraction and Expansion 		
5	June / 1 WEEK (5 days)	2-6-2018	Unit-3 Hereditary in living organisms <ul style="list-style-type: none"> ▪ Cell Division ▪ Heredity ▪ Basis of Heredity (Chromosomes, DNA and Genes in Plant and Animal Cells) 	Strand 1: Life Science Content Standard: Students will understand, explain and differentiate between the structure, characteristics, and basic needs of living things, the processes of life, and will also investigate the diversity of life and how the living things interact with each other and their environment.	6
SUMMER HOLIDAYS 8-6-2018 TO 28-8-2018					
6	August & September / 3 days)	28-8-2018	Revision Unit-4 Biotechnology <ul style="list-style-type: none"> ▪ Biotechnology ▪ Selective breeding 	Strand 1: Life Science Content Standard: Students will understand, explain and differentiate between the structure, characteristics, and basic needs of living things, the processes of life, and will also	3

				investigate the diversity of life and how the living things interact with each other and their environment.	
7	September (2 days)	2-9-2018	Revision		2
FIRST TERM EXAMINATION 4-9-2018 TO 18-9-2018					
7	September and October 2 WEEKS (10 days)	23-9-2018	Unit-4 Biotechnology <ul style="list-style-type: none"> ▪ DNA and genes ▪ DNA Replication ▪ Introduction of Gene into Bacterium ▪ Genetic Modifications (Microorganism Resistance, Improved Nutrition and Quality of Food) ▪ Biotechnology Product Saving Lives (Insulin, Vaccines) ▪ General Applications (Agriculture, Environment, Health, Food Production and Preservation) ▪ DNA fingerprinting 	Strand 1: Life Science Content Standard: Students will understand, explain and differentiate between the structure, characteristics, and basic needs of living things, the processes of life, and will also investigate the diversity of life and how the living things interact with each other and their environment.	12
8	October 2 WEEKS (10 days)	7-10-2018	Unit-7 Acid, Alkalis and Salts <ul style="list-style-type: none"> • Introduction to Acids, Alkalis and Salts • Properties of Acids, 	Strand 2: Physical Science Content Standard: Students will describe and explain common properties, forms and interactions of energy and	12

			<p>Alkalis and Salts</p> <ul style="list-style-type: none"> • Uses of Acids, Alkalis and Salts • PH and its Range (1-14) in Aqueous Medium • Indicators and their Uses (Natural Indicators from Fruits and Vegetables) 	<p>matter including their transformations and applications in chemical, physical and biological systems.</p>	
9	October and November / 2 WEEKS (10 days)	21-10-2018	<p>Unit-8 Pressure</p> <ul style="list-style-type: none"> ▪ Pressure, Force and Area ▪ Units (N/m² and Pascal) ▪ Hydraulics and Hydraulic Systems ▪ Water Pressure ▪ Pneumatics (How Gases Behave under Pressure?) ▪ Gas Pressure In a Container ▪ Aerosols ▪ Atmospheric Pressure 	<p>Strand 2: Physical Science Content Standard: Students will describe and explain common properties, forms and interactions of energy and matter including their transformations and applications in chemical, physical and biological systems.</p>	12
10	November/ 2 WEEKS and 2 days (12 days)	4-11-2018	<p>Unit-13 Space in exploration</p> <ul style="list-style-type: none"> ▪ Telescope, Space Crafts, Spectroscopes ▪ Space Exploration 	<p>Strand 3: Earth and Space Science Content Standard: Students will be knowledgeable of the composition, structure, processes and interactions among the Earth's systems. They will also understand the solar system and scientific theories about the origin of the solar system, and explain how</p>	14

				we learn about the universe.	
11	November/ 1 WEEK 5 days	21-11-2018	Revision		6
SECOND TERM EXAMINATION 27-11-2018 TO 11-12-2018					
WINTER BREAK 14-12-2018 TO 29-12-2018					
12	December & January/ 1 WEEK and 3 days (8 days)	30-12-2018	Unit – 2 Kidney and excretion <ul style="list-style-type: none"> ▪ Role of water in the body ▪ Excretory System (Structure of Kidney and its Role in Excretion) ▪ Excretion of urea ▪ Kidney failure ▪ Waste products in plants 	Strand 1: Life Science Content Standard: Students will understand, explain and differentiate between the structure, characteristics, and basic needs of living things, the processes of life, and will also investigate the diversity of life and how the living things interact with each other and their environment.	9
13	January/ 3 WEEKS (16 days)	9-1-2019	Unit-11Electricity in action <ul style="list-style-type: none"> ▪ Generating Electricity (Model Generator) ▪ Portable Generator (Bicycle Dynamo) ▪ Problem of Generating Electricity ▪ Working of Power Station ▪ Other Sources of Electricity ▪ Introduction to Electronic Systems ▪ Uses of Components 	Strand 2: Physical Science Content Standard: Students will describe and explain common properties, forms and interactions of energy and matter including their transformations and applications in chemical, physical and biological systems.	19

			(Input, Processor, Output)		
14	February / 2 WEEKS (10 days)	3-2-2019	<p>Unit-5 Pollution and the environment</p> <ul style="list-style-type: none"> ▪ Air Pollutants (Sulphur dioxide, Carbon Monoxide, Oxides of Nitrogen, Chlorofluorocarbons) ▪ Sources (Natural and From Human Activities) ▪ Harmful Effects (on Human Organ Systems : Lung Diseases, Brain Damage, Breathing, Headaches) ▪ Effects of Human Activity on Environment (Greenhouse Effect, Ozone Depletion and Global Warming, Acid Rain, Wild Life, Deforestation, Lack of Energy Resources) ▪ Saving the Earth (Solid Waste Management, Recycling of Materials, Conservation of Resources, Environmental Campaigns, 	<p>Strand 1: Life Science Content Standard: Students will understand, explain and differentiate between the structure, characteristics, and basic needs of living things, the processes of life, and will also investigate the diversity of life and how the living things interact with each other and their environment.</p>	12

			Responsibility for All)		
15	February/ 2 WEEKS (10 days)	17-2-2018	Unit-12 Lenses <ul style="list-style-type: none"> ▪ Lenses ▪ Types of Lenses (Converging and Diverging Lenses) ▪ Image Formation by Ray Diagram ▪ Image Formation in Simple Camera and Human eye ▪ Uses of Lenses 	Strand 2: Physical Science Content Standard: Students will describe and explain common properties, forms and interactions of energy and matter including their transformations and applications in chemical, physical and biological systems.	12
16	March/ 1 week (5 days)	3-3-2018	Revision		6
ANNUAL EXAMINATION 10-3-2019 TO 24-3-2019					

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