



Pakistan Urdu School- Kingdom of Bahrain
Curriculum Implementation Plan for Science Grade V

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	08-04-18	Unit No –1. Building units of the body (Understanding Ourselves)	Life Science	6 periods
			What is our body made of? The building blocks of life.	To introduce the cell as the basic building block of life.	
			Unicellular and multicellular organism.	To define with examples, and to compare, unicellular and multicellular organisms.	
			Functions of an animal and plant cell.	To name and explain the functions of some basic organelles of animal and plant cells.	
			How the plant cell is different from an animal cell?	To compare animal and plant cells.	
			Lab activity.	Microscopic view of an onion cell, animal cell and plant cell	
2.	April	15-04-18	Unit No –2. Brain (Understanding Ourselves)	Life Science	6 periods
			Introduction/What does it look like? What does it feel like?	To emphasize that the brain is a very important organ of the body.	
			Inside the brain	To describe its appearance and its structure.	
			Parts of the brain	To identify location of brain in the body and its three main parts.	
			Functions of different parts of the brain	To explain the distinct functions of the three main parts of the human brain.	
			Lab Activity	Memory test.	
3.	April	22-04-18	Unit No –3. Lungs (Understanding Ourselves)	Life Science	8 periods
			Lungs are the respiratory organs Respiration	To define respiration To explain, using a diagram, the	

				process of inhalation and exhalation.	
			The organs of respiration	To explain in detail the working of the three main organs of the respiratory organs.	
			The organs of respiration	To explain in detail the working of the three main organs of the respiratory organs.	
			Environment watch	To emphasize the harmful effects of tobacco on the health.	
			Lab Activity	Prepare a working model of lungs. Design a poster against smoking.	
4.	April	02-05-18	Unit No –19. Light	(Physical Science)	6 periods
			Light travels in a straight line	To explain that shadows are cast because light travels in straight lines.	
			Pinhole Camera	To explain the working of a pinhole camera.	
			Reflection and Refraction of light	To explain the reflection, refraction of light and their effects.	
			Transparent, translucent, and opaque objects	To differentiate between transparent, translucent and opaque objects.	
			Lab Activity	Experiment to show light travels in a straight line. Refraction of light.	
5.	May	09-05-18	Unit No –15. Electricity (Electricity and magnetism)	Physical Science	6 periods
			Introduction of an atom and its sub-atomic particles	To introduce the atom, the three sub-atomic particles of an atom and the charges that they carry.	
			Electrons, protons and neutrons electric charge	To compare the properties of negative and positive charges.	
			Current electricity	To explain the current electricity by examining the movements of the sub-atomic particles of an atom..	

			Static electricity	To explain the static electricity by examining the movements of the sub-atomic particles of an atom.	
			Electricity in nature	To explain how lightning is caused.	
			Lab Activity	Make a simple circuit using battery, bulb and switch.	
6.	May	16-05-18	Unit No –7. Living Things	Life Science	6 periods
			Characteristics of living things	To classify living things on the basis of common characteristics.	
			Seven characteristics of living things	To highlight the seven characteristics of living things- nutrition, respiration, excretion, sensitivity, movement, growth and reproduction.	
			All living things are sensitive, and can move by themselves	To explore the ways in which living organisms live, behave and reflect these characteristics.	
			All living things reflect the characteristics	To explain those the ways in which living organisms live and behave reflect these characteristics.	
			Lab Activity	Growth and movement of a plant.	
7.	May	27-05-18	Unit No –10. Soil (Materials and matter)	Physical Science	6 periods
			What the soil is made of?	To examine and explain the components of soil.	
			Animals live in soil		
			Layers of soil	To explain that soil is composed of three distinct layers.	
			Types of soil	To discuss the differences between sand, silt and clay.	
			Lab Activity	Differentiate between three types of soil using given soil samples.	
2nd Term					

8.	Sep	23-09-18	Unit No –13. Air (The earth and the atmosphere)	Earth and space science	8 periods
			Air has mass and weight	To introduce the two main properties of air: weight and mass.	
			The Ozone layer	To explain the importance of ozone layer.	
			Layers in the atmosphere	To explore and differentiate the layers in the atmosphere.	
			Composition of the air	To examine the composition of the air.	
			Composition of the air	To identify the uses of some important gases	
			Uses of wind and compressed air	To study examples of how wind and compressed air are used	
			Lab Activity	Candle burning experiment	
9.	Oct	02-10-18	Unit No –12. The sun and the moon (Sky and space)	Earth and space science	7 periods
			Phases of the moon	To investigate the composition of the sun and moon and explore the Moon's phases.	
			Gravity from the moon and the sun	To explain the effect of forces of the sun and the moon's gravity on the earth.	
			Lab Activity	Pretend that you are an astronaut exploring moon. Make a postcard to your friend and write a description of moon's landscape in it. Draw phases of the moon with color papers. Collect the pictures of the artificial satellites of the earth and stick it in your notebook/lab notebook.	
10.	Oct	10-10-18	Unit No –5. Digestion (Understanding Ourselves)	Life Science	7 periods
			Digestive System	To explain the digestive system.	

			Organs of the digestive system	To identify all the organs that makes up the digestive system and explains all the functions.	
			What happens to the food when it gets inside your body?	To explain the digestion process with the help of a diagram.	7 periods
			Lab Activity	Prepare a model of digestive system.	
11.	Oct	18-10-18	Unit No -4. The Human Heart (Understanding Ourselves)	Life Science	
			A muscular organ	To introduce the heart as a muscular organ which pumps blood around the body?	
			Structure of the heart	To explain the structure of the heart and identify its components.	
			Function of the heart	To introduce, step by step, the basic process of the circulation of the blood in the heart.	
			Lab Activity	Prepare a model of heart.	
12.	Oct	28-10-18	Unit No -14. Pollution in the environment (The earth and the atmosphere)	Earth and space science	7 periods
			Degradable and biodegradable waste	To define waste and compare degradable and biodegradable waste.	
			Waste causes pollution	To explain that waste creates pollution.	
			Types of Pollution	To classify pollution into three types: land, water and air.	
			Air Pollution	To examine the causes and effects of pollution on the environment.	
			Reducing pollution	To explore ways of reducing pollution.	
			Environment change	To explore awareness of the causes and effects of climate change.	
			Lab Activity	Experiment to check quality of Air.	

13.	Nov	05-11-18	Unit No -18. SOUND	Physical Science	6 periods
			Sound as a form of energy	To define sound as the vibration of molecules and a form of energy.	
			Vibrations produce sound waves	To explain that sound travels in waves through a medium that can be solid, liquid and gas.	
			Sound needs a medium to travel through.	To explain that because sound is produced by vibration and travels in waves, it cannot travel in vacuum.	
			Can sounds be measured?	To introduce hertz (Hz) as the unit of measurement used to measure the frequency of sound.	
			Lab Activity	Produce small waves using tuning fork.	
3 rd Term					
14.	Dec	30-12-18	Unit No -9. Flowering and non-flowering plants	Life Science	7 periods
			Classification of plants.	To explain the classification of plants into various groups.	
			Flowering and non-flowering plants	To identify and discuss the distinguishing characteristics of flowering and non-flowering plants.	
			Monocots and dicots	To classify flowering plants into monocots and dicots.	
			Comparison of monocot and dicot plants.	To compare monocot and dicot plants.	
			Lab Activity	Microscopic view of C.S. of root and stem.	
15.	Jan	08-01-19	Unit No -16. Electromagnets (Electricity and magnetism)	Physical Science	8 periods
			Magnetic poles	To introduce magnetism as an attracting force. To demonstrate that like poles repel and unlike poles attract each other.	

			Magnetic field	To discuss the magnetic field.	
			Creating an electromagnet	To investigate electromagnetism by creating an electromagnet.	
			Magnetic and non-magnetic materials	To differentiate between magnetic and non-magnetic materials.	
			Lab Activity	Create an electromagnet.	
16.	Jan	17-01-19	Unit No -6. Looking after yourself (Understanding Ourselves)	Life Science	7 periods
			Microorganisms and disease	To create an understanding of microorganisms.	
			Useful and harmful microorganisms	To distinguish between some common useful and harmful microorganisms.	
			Classify microorganisms	To classify microorganisms and causing different diseases.	
			How microorganisms enter the body?	To classify how microorganisms can enter the body.	
			Preserving food	To identify ways of preserving food.	
			Lab Activity	Microscopic view of Rhizopus and amoeba.	
17.	Jan	27-01-19	Unit No -17. Forces	Physical Science	8 periods
			Forces in action	To review the forces of push and pull and their effects on the objects.	
			Mass and weight	To identify the spring balance as an instrument used to measure forces, and the Newton as the unit of measuring force.	
			Friction	To explain friction and compare its advantages and disadvantages in daily life.	
			Gravity	To explain that gravity is a force of attraction.	

			Mass and weight	To differentiate between the mass and the weight of an object.	
			Lab Activity	Measure force of two objects using a spring balance	
18.	Feb	05-02-19	Unit No -8. Life cycle of animals	Life Science	7 periods
			Reproduction by a single cell and by the joining of two cells	To explain reproduction from a single parent cell and from the fusion of two parent cells	
			Life Cycle	To define life cycle; birth, developing into adult, reproduction and eventually death.	
			Life cycle of different organisms	To compare the life cycles of different organisms.	
			Complete and incomplete metamorphosis	To observe the changes that occurs during the growth and development of insects and frogs.	
			Lab Activity	Model of life cycle of a butterfly.	
19.	Feb	13-02-19	Unit No -11. Matter	Physical Science	8 periods
			Matter	To review the pupils' existing knowledge of the meaning and forms of matter.	
			Comparing states of matter	To examine the different properties of matter in terms of arrangement of particles.	
			Changes of state	To examine the effect of heat on the movement and density of particles.	
			Equations and explanations	To define and identify these changes of states in their environment; evaporation, condensation, sublimation, melting and freezing.	
			The water cycle	To provide a simple explanation of the water cycle and to emphasize the roles played by condensation and evaporation.	

			Reversible and irreversible changes	To compare reversible and irreversible changes.	
			Lab Activity	Experiment to show reversible changes. Experiment to show irreversible changes.	

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