

MITCON International School

Syllabus (2019-2020)

Grade :VII

Subject: Science

MONTH	STRANDS	TOPICS	SUB-TOPICS
April	Food and Nutrition	Nutrition in Plants	<ul style="list-style-type: none"> • Autotrophic Nutrition • Heterotrophic Nutrition • Symbiosis and Nitrogen Fixation • Recycling of Nutrients in Soil • More on Nutrition in Plants
April		Nutrition in Animals	<ul style="list-style-type: none"> • Steps of Nutrition • Nutrition in Amoeba • Nutrition in Humans • Nutrition in Herbivores
April	Matter Around Us	Animal Fibres	<ul style="list-style-type: none"> • Types Of Wool • Processing Of Wool • Processing of Silk • Occupational Hazards
June		Physical and Chemical Changes	<ul style="list-style-type: none"> • Classifying Changes: Physical and Chemical • Physical Changes: Sublimation and Crystallisation • Characteristics of Chemical Changes • Rusting and Its Effects
June	Light, Heat and Sound	Heat Energy	<ul style="list-style-type: none"> • Heat and Temperature • Parts of Thermometer • Types of Thermometer • Conversion of Temperature Scales
June		Transfer of Heat	<ul style="list-style-type: none"> • Conduction • Convection • Radiation • Minimising Transfer of Heat
July	Natural Phenomena	Weather and Climate	<ul style="list-style-type: none"> • Earth's Atmosphere • Weather Factors • Clouds • Climate Factors
July		Formation of Winds	<ul style="list-style-type: none"> • Air Exerts Pressure • Wind Formation • Monsoon winds

			<ul style="list-style-type: none"> • Wind Currents
July		Weather Systems and Maps	<ul style="list-style-type: none"> • Air Pressure and Wind • Air Masses and Fronts • Global Winds and Cyclones • Severe Weather
July	Living World	Climate and Adaptation	<ul style="list-style-type: none"> • Adaptation in Rainforests • Adaptation in the Polar Regions • Adaptation in Deserts • Adaptation and Evolution
July	Our Environment	Soil	<ul style="list-style-type: none"> • Soil profile • Types Of Soil • Percolation Rate of Soil • Soil and Crops
August		Acids and Bases	<ul style="list-style-type: none"> • Knowing Acids and Bases • Testing Acids and Bases • Acids and Bases: Strong and Weak • Effect of Acids and Bases on the Environment
August	Matter Around Us	Salts	<ul style="list-style-type: none"> • Making Salts • Neutralization Reactions Produce Heat • Neutralization in Daily Life • Types of Salts
August	Living World	Respiration in Organisms	<ul style="list-style-type: none"> • Types of Respiration • Respiration in Animals and Plants • Respiration in Humans • Gas exchange in Lungs
		Circulation in Humans	<ul style="list-style-type: none"> • Components of Blood • Human Circulatory System • Heartbeat and Pulse rate • Inside the Heart
October	Living World	Excretion in Humans	<ul style="list-style-type: none"> • Waste Substances in Humans • Sweating it Out • Kidneys and Urine • Kidney Problems and Dialysis
October	Living World	Transportation in Plants	<ul style="list-style-type: none"> • Materials for Transportation • Absorption by Roots • Transportation By Vessels • Transpiration and Transportation

October	Living World	Asexual Reproduction In Plants	<ul style="list-style-type: none"> • Vegetative propagation: Natural methods • Vegetative propagation: Artificial methods • Asexual Reproduction in Microorganisms • Benefits of Asexual Reproduction
November	Living World	Sexual Reproduction In Plants	<ul style="list-style-type: none"> • Types of Pollination • Seed Formation • Dispersal Of Seeds • Life Cycle of Plants
November	Motion and Measurement	Motion and Time	<ul style="list-style-type: none"> • Fast and Slow motion • Uniform and Non-Uniform Motion • Simple Pendulum • Calculating Speed
November		Distance-Time Graphs	<ul style="list-style-type: none"> • Drawing a Graph • Uniform and Non-Uniform Motion • Calculating Speed • Velocity and Acceleration
November	Electricity and Magnetism	Types of Electric Circuits	<ul style="list-style-type: none"> • Primary and secondary cells • Battery • Electrical Symbols • Circuit Diagrams
December		Electric Current and Heating Effects	<ul style="list-style-type: none"> • Heating Effects and Its Uses • Heat: Characteristics of Wires • Electric Fuse • Comparing: Electric Fuse and MCB • More on Heating Effect Of Electric Current
December		Electric Current and Magnetic Effects	<ul style="list-style-type: none"> • Magnetic Effects • Electromagnet • Temporary Magnets • Electric Bell • More on Magnetic Effect of Electric Current
December	Light, Heat and Sound	Mirrors	<ul style="list-style-type: none"> • Plane Mirrors • Spherical Mirrors • Spherical Mirrors and Images • Uses of Mirrors
January		Lenses	<ul style="list-style-type: none"> • Dispersion of Light • Types of Lenses • Formation of Images in Lenses

			<ul style="list-style-type: none"> • Uses of Lenses
January	Air and Water	Availability of Water	<ul style="list-style-type: none"> • Shortage of Water: Effects • Water Cycle • Water Table • Water Management Techniques
January		Waste Water	<ul style="list-style-type: none"> • Water to waste water • Journey of waste water • Process of Cleaning Waste water • Minimising Waste Water
January		Treating Sewage	<ul style="list-style-type: none"> • Harmful Effects of Sewage • Sewage Treatment • Sewage treatment Plant: Case Study • Alternative Methods of Sewage Disposal
January	Our Environment	Forests	<ul style="list-style-type: none"> • Forest Profile • Importance of Forests • Protecting Our Forests • The forest Floor