MADANI GIRLS SCHOOL / DISCOVERY / COMBINED SCIENCE / 2021-22

2021-2022	AUTUMN					SPRING				SUMMER			
	HT1			HT2		HT3		HT4		HT5		HT6	
7	**Area of study:** Investigations Key concepts: Introduction to practicals Assessment: Practical skills oracy, peer assessment	**Area of study:** 7A Cells Key concepts: Structures in living things Assessment: End of topic test, oracy, peer assessment	**Area of study:** 7F Acids and bases Key concepts: Acidity and alkalinity Assessment: End of topic test	**Area of study:** 7I Energy Key concepts: Stores and transfers Assessment: End of topic test	**Area of study:** 7B Animal Reproduction Key concepts: Making new organisms Assessment: End of topic test	**Area of study:** 7G Particles Key concepts: States and behaviour Assessment: End of topic test, peer assessment	**Area of study:** 7J Electricity and magnetism Key concepts: Circuits, current, voltage, energy Assessment: End of topic test	**Area of study:** 7C Muscles and bones Key concepts: Enabling of movement Assessment: End of topic test	**Area of study:** 7H Element, & compounds Key concepts: Arrangement of particles Assessment: End of topic test	**Area of study:** 7K Forces and motion Key concepts: Types of forces, measurements Assessment: End of topic test	**Area of study:** 7D Ecosystems Key concepts: Interdependence, energy transfers Assessment: End of topic test	**Area of study:** 7E Separating mixtures Key concepts: Practical methods Assessment: End of topic test	**Area of study:** 7L Sound and light Key concepts: Transfer and speed Assessment: End of topic test
8	**Area of study:** Investigations Key concepts: Introduction to practicals Assessment: Practical skills oracy, peer assessment	**Area of study:** 8A Food and Nutrition Key concepts: Nutrients and digestion Assessment: End of topic test	**Area of study:** 8E Combustion Key concepts: Fuels and products Assessment: End of topic test	**Area of study:** 8I Fluids Key concepts: Density and pressure Assessment: End of topic test	**Area of study:** 8B Plant reproduction Key concepts: Pollination and germination Assessment: End of topic test	**Area of study:** Photosynthesis Key concepts: Synthesis of glucose Assessment: End of topic test	**Area of study:** 8F Periodic table Key concepts: Groups and trends Assessment: End of topic test	**Area of study:** 8K Energy transfers Key concepts: Temperature and efficiency Assessment: End of topic test	**Area of study:** 8C Breathing and respiration Key concepts: Gas exchange Assessment: End of topic test	**Area of study:** 8G Metals and their uses Key concepts: Reactions of metals Assessment: End of topic test	**Area of study:** Metal reactivity Key concepts: Trends in groups Assessment: End of topic test	**Area of study:** 8L Earth and space Key concepts: Solar system and beyond Assessment: End of topic test	**Area of study:** Genetics and evolution Key concepts: Generational gene transfer Assessment: End of topic test
9	**Area of study:** Investigations Key concepts: Introduction to practicals Assessment: Practical skills oracy, peer assessment	**Area of study:** B6 Communicable diseases Key concepts: Pathogens and disease; Vaccination and immunity Assessment: End of topic test, oracy tasks		**Area of study:** C6 Extracting metals Key concepts: Chemical reactions, atoms and ions; extracting metals, Industrial processes Assessment: End of topic test, oracy task		**Area of study:** P6 Everyday motion Key concepts: Speed and its measurement Assessment: End of topic test	**Area of study:** B6 Non-communicable diseases Key concepts: Risk factors and treatments Assessment: End of topic test	**Area of study:** C6 Materials; Crude oil Key concepts: Choosing materials; Fuels Assessment: End of topic test	**Area of study:** P6 powering the Earth Key concepts: Energy resources Assessment: End of topic test	**Area of study:** Power and National Grid Key concepts: Power to homes, efficiency of power transfer Assessment: End of topic test	**Area of study:** B6 Feeding the human race Key concepts: Genetic engineering, biotechnology Assessment: End of topic test	**Area of study:** C6 atmosphere and pollution Key concepts: Global warming, climate change Assessment: End of topic test	**Area of study:** 8L Earth and space catch-up Key concepts: Solar system and beyond Assessment: End of topic test
10	**Area of study:** B1 Cell-level systems Key concepts: DNA, enzymes, respiration, photosynthesis Assessment: End of module test	**Area of study:** C1 Particles Key concepts: The particle model and atomic structure Assessment: End of module test	**Area of study:** P1 Matter Key concepts: The particle model and changes of state Assessment: End of module test	**Area of study:** B2 Scaling up Key concepts: Supplying the cell; challenges of size Assessment: End of module test		**Area of study:** C2 Elements compounds and mixtures Key concepts: Purity, separating mixtures, bonding, properties of materials Assessment: End of module test		**Area of study:** P2 forces Key concepts: Motion, Newton's laws and forces in action; calculations Assessment: End of module test; mock exam		**Area of study:** B3 Organism-level systems Key concepts: Nervous system, endocrine system, homeostasis Assessment: End of module test	**Area of study:** C3 Chemical reactions Key concepts: Formulae, energetics, redox, pH, electrolysis Assessment: End of module test	**Area of study:** P3 Electricity and magnetism Key concepts: Static, charge, circuits, magnets, magnetic fields Assessment: End of module test
11	**Area of study:** B3 Organism level systems Key concepts: Nervous system, endocrine system, homeostasis Assessment: End of module test; snapshot assessment	**Area of study:** C3 Chemical reactions Key concepts: Quantitative, energetics, redox, electrolysis Assessment: End of module test	**Area of study:** P3 Electricity and magnetism Key concepts: Static, charge, circuits, magnets, magnetic fields Assessment: End of module test	**Area of study:** B4 Community-level systems Key concepts: Ecosystems and nutrient cycles Assessment: End of module test		**Area of study:** C4 Predicting and Identifying reactions and products Key concepts: Trends in groups; reactivity Assessment: End of module test; mock exam	**Area of study:** P4 Waves and radioactivity Key concepts: Wave behaviour, the EM spectrum; radioactive emissions Assessment: End of module test	**Area of study:** B5 Genes, Inheritance and selection Key concepts: Variation, meiosis, natural selection and evolution Assessment: End of module test	**Area of study:** C5 Monitoring and controlling reactions Key concepts: Controlling rates of reaction, equilibria Assessment: End of module test	**Area of study:** P5 Energy Key concepts: Work done, power and efficiency Assessment: End of module test	B6, C6, P6 Review Key concepts: Global Challenges revision Assessment: End of module tests	**Students no longer on roll**	