	Unit of work & brief outline of what will be covered.	Key Objectives – what will students learn	Assessment
1	8F Periodic Table	the varying physical and chemical properties of different elements the principles underpinning the Mendeleev Periodic Table the Periodic Table: periods and groups; metals and non-metals how patterns in reactions can be predicted with reference to the Periodic Table the properties of metals and non-metals the chemical properties of metal and non-metal oxides with respect to acidity.	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
	8L Earth and Space	gravity force, weight = mass x gravitational field strength (g), on Earth g=10 N/kg, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only) our Sun as a star, other stars in our galaxy, other galaxies the seasons and the Earth's tilt, day length at different times of year, in different hemispheres	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding

		the light year as a unit of astronomical distance.	Observation of practical work and giving feedback accordingly
2	8C Breathing and Respiration	aerobic and anaerobic respiration in living organisms, including the breakdown of organic molecules to enable all the other chemical processes necessary for life a word summary for aerobic respiration the process of anaerobic respiration in humans and micro-organisms, including fermentation, and a word summary for anaerobic respiration the differences between aerobic and anaerobic respiration in terms of the reactants, the products formed and the implications for the organism.	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
	8G Materials and Their Uses	the properties of metals and non-metals understanding corrosion and writing equations to describe it describing the reactivity of metals with water and with acids difference between pure metals and alloys the order of metals and carbon in the reactivity series	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly

3	8K Energy transfers	heating and thermal equilibrium: temperature difference between two objects leading to energy transfer from the hotter to the cooler one, through contact (conduction) or radiation; such transfers tending to reduce the temperature difference: use of insulators calculating power and efficiency using the power of an appliance to work out cost	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
	8A Food and Nutrition	content of a healthy human diet: carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water, and why each is needed calculations of energy requirements in a healthy daily diet the consequences of imbalances in the diet, including obesity, starvation and deficiency diseases the tissues and organs of the human digestive system, including adaptations to function and how the digestive system digests food (enzymes simply as biological catalysts	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
4	8E Combustion	Describe oxidation reactions of metals and non-metals Explain changes in mass seen in oxidation reactions	Key Assessed Piece Self-assessment of DO NOW questions

	8I Fluids	Define combustion Describe the reaction of hydrogen and hydrocarbons with oxygen Identify the products from combustion Use word equations to model combustion reactions Explain how to control a fire by using the fire triangle Describe the pollutants which are formed by burning fuels and what problems they can cause atmospheric pressure, decreases with increase of height as weight of air above decreases with height pressure in liquids, increasing with depth; upthrust effects, floating and sinking similarities and differences, including density differences, between solids, liquids and gases	Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
5	8D Unicellular Organisms	the structural adaptations of some unicellular organisms State the meaning of: multicellular, unicellular Identify organisms that are unicellular and those that are multicellular Explain why multicellular organisms need	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning

		efficient transport systems Recall the conditions under which yeast grow quickly Recall what happens in aerobic and anaerobic respiration in yeast Explain what happens in fermentation.	Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
	8H Rocks	the composition of the Earth the structure of the Earth the rock cycle and the formation of igneous, sedimentary and metamorphic rocks	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
6	8J Light	the similarities and differences between light waves and waves in matter light waves travelling through a vacuum; speed of light the transmission of light through materials: absorption, diffuse scattering and specular reflection at a surface	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning

		use of ray model to explain imaging in mirrors, the pinhole camera, the refraction of light and action of convex lens in focusing (qualitative); the human eye light transferring energy from source to absorber leading to chemical and electrical effects; photo-sensitive material in the retina and in cameras colours and the different frequencies of light, white light and prisms (qualitative only); differential colour effects in absorption and diffuse reflection.	Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly
	8B Plants and their Reproduction EoY Test Revision	the importance of plant reproduction through insect pollination in human food security reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.	Key Assessed Piece Self-assessment of DO NOW questions Teacher questioning in class Mini white board questioning Review of Tassomai accuracy and understanding Observation of practical work and giving feedback accordingly