Long Term Curriculum Planning - Year 7

HT	Fertile Question	Stimulus /Unit	Description	Summative Performance Of Understanding	Links to GCSE
Autumn	Why can't babies walk? Which is more efficient, an amoeba, a plant cell or an animal cell?	Organisms	Movement:- Students will learn about levels of organisation and the skeleton. Cells:- Students will learn about plant, animal and specialised cells, and how substances move in and out of cells.	Response to and review of fertile question. End of module multiple choice quiz and 6 mark question.	B1 – Cell biology B2 – Organisation
	How do forces change an objects motion?	Forces	Students will learn about balanced and unbalanced forces, speed, distance-time graphs and gravity.		P5 - Forces
	What really happens when a sugar topped ice cube melts?" What happens to helium balloons when you let go and they float higher into the air?"	Matter	Particle Model:-Students will learn about the particle model of matter and how it applies to changes of state. Gas Pressure:- Students will learn about gas pressure and density Separating Mixtures: - Students will learn different techniques to separate the components of mixtures.		C1 - Atomic structure & periodic table. C2 - Structure and bonding
Spring 1	Aardvark or anteater do we need both? What would happen if there were no more honey bees?	Ecosystems	Food webs and competition – students will learn about how food chains can be disturbed and how the ecosystem is disturbed and restores balance. Flowers, pollination and seed dispersal- Students will learn the anatomy of the plant male and female reproductive systems and how they reproduce.		Food chains and webs, ecosystems, competition, plant reproduction.
	What really happens when you flick that switch?	Electromagnets	Students will learn about potential difference, resistance, circuits and current.		P2 – Electricity
	Why can gold be buried for thousands of years and still remain shiny whereas most other metals corrode away?"	Reactions	Metals and Non-metals:-Students will learn about the key properties of metals and non-metals. They will also study oxidation reactions, displacement reactions and the reactivity series for metals. Acids and Alkali:-Students will learn about acids, alkali, indicators and the pH scale. They will also learn about salt making reactions		C2 - structure and bonding. C4 - chemical reactions.
Summer 1	Why does a horse have long legs? When does life begin?	Genes	Variation:- Students will learn how variation happens, the different types of variations and how organisms adapt to change. Human reproduction:- Students will learn about the changes that occur during puberty and the stages of human reproduction from fertilisation through to the developed fetus.		B6 – Inheritance, variation & evolution
	How do our senses help us to find out about the world?	Waves	Sound:-Students will learn how sound travels, properties of a sound wave and how these affect; pitch, volume and the frequency of a wave. Light:-Students will learn about how light travels and why we see things we do in the real world.		P6- Waves
	What's beneath our feet and why is it important? Will people live on Mars in our lifetime?	Earth	Earth Structure:-Students will learn about the structure of the Earth and how the different types of rocks are recycled through geological time. Universe:-Students will learn how planets orbit our Sun and about our Solar System and what lies beyond.		C9 – Chemistry of the atmosphere P8 – Space physics