

Year 7 Summer Term Curriculum Plan

Students will cover three topics; one for each of the Sciences. Depending on the class your child is in, these topics will be taught in different orders and some groups are split between two teachers. It will be made clear at the start of term via email or on epraise which topic the students will be starting with, and in the case of split groups, which teacher will be setting work for which topic. If there are any queries please do not hesitate to contact the Faculty Leader for Science, Dr Jennings (adam.jennings@jmhs.hereford.sch.uk)

Overview for Biology topic – Feeding Relationships and Classification

To describe the interdependence of organisms including food chains, webs, pyramid of numbers and mass including accumulation of toxins. Describe the basic concept of classification.

	Key Content
Week 1	<ul style="list-style-type: none">• Draw and label a food chain and a food web• Describe the impact of adding or removing organisms from the food web• Draw and compare pyramids of number and biomass
Week 2	<ul style="list-style-type: none">• Describe simple techniques to sample and count organisms• Recall the difference between dependent, independent and control variables• Describe the basic principles of Linnaean classification

Overview for Chemistry topic – Chemical Reactions

To develop a basic understanding of atomic structure and how atoms interact in chemical reactions. Describe chemical reactions using equations and begin to understand energy changes during reactions.

	Key Content
Week 1	<ul style="list-style-type: none">• State that all matter is composed of atoms• Understand that an element is only composed of one type of atom• Describe the difference between elements and compounds• Practise writing and interpreting chemical formulae
Week 2	<ul style="list-style-type: none">• List signs that a chemical reaction has taken place• Compare chemical and physical changes• Describe simple chemical reactions using word equations
Week 3	<ul style="list-style-type: none">• Introduce the idea of conservation of mass in a chemical reaction• Use combustion of fuel as a model of a chemical reaction• Compare exothermic and endothermic reactions

Overview for Physics topic – Space

Structure of solar system and interpreting data on the solar system. To be able to use the Solar System model to explain day, night, months, years and seasons.

	Key Content
Week 1	<ul style="list-style-type: none">• Describe the structure of the Solar System• Relate this to day and night and length of a year• Understand the scale of the Solar System using models
Week 2	<ul style="list-style-type: none">• Explain why we have seasons• Compare different planetary temperatures using graph skills• Describe the phases of the moon• Explain why we have eclipses
Week 3	<ul style="list-style-type: none">• Discuss conditions for life to exist on other moons and planets• Consider the various requirements for space travel