Year 8 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 – Photosynthesis

To understand the basic idea of energy conversion in photosynthesis. To be able to give a simple explanation of how specific adaptations and specialised cells facilitate photosynthesis in plants.

	Key Content
Week 1	• Recall general structure of a plant • Describe structure of a general plant cell • Compare specialised plant cells such as palisade and root hair cells
Week 2	• State the photosynthesis equation • State where the reactants come from and what happens to the products • Compare leaf adaptations in different plant species • Compare levels of respiration and photosynthesis in plants
Week 3	• List limiting factors of photosynthesis • Describe how limiting factors interact • Describe adaptations of plants to extreme environments

Overview for Chemistry topic – Reactions of Metals

Identify the properties of metals and describe the different reactions of metals

	Key Content
Week 1	• State the general equations for reaction of metals and acids • List metals in the reactivity series • Relate the reactivity of metals to displacement reactions
Week 2	• Explain how metal oxides form using rusting as an example • Describe reactions of metal carbonates and acids • Discuss decomposition reactions and some applications
Week 3	• Describe reactions of metals oxides and acids • Define precipitation and give some examples

Overview for Physics topic – Magnets and Electromagnets

Describe how magnets produce magnetic fields and how this links to electromagnets.

	Key Content
Week 1	• List properties of magnets • Identify magnetic and non-magnetic materials • Describe the pattern of a magnetic field
Week 2	• Relate magnetic field strength to the pattern of field lines • Describe field lines when two magnets are placed near each other
Week 3	• Describe how to make a simple electromagnet • Explain how the strength of an electromagnet can be changed