**KS3 SCIENCE CURRICULUM PLAN**

Planning Grid Groups 4, 5, 6, 7 Science 2019-2020

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| --- | --- | --- | --- |
|  | Autumn | Spring | Summer |
| Unit (s) | 3.6 Component 6 Physics  Electricity, magnetism and waves  Electricity is used in domestic and industrial situations to supply energy. Electric current is a flow of electrical charge and measured in amps. Direct current (d.c.) is supplied by cells and alternating current (a.c.) is supplied by the mains, but in both cases the size of the current depends on the resistance in the circuit. When a current flows through a coil of wire an electromagnet is formed, which like permanent magnets, can exert a force over a distance.  Electric currents can also be used to produce electromagnetic waves, which have many uses including the transmission of information and the transfer of energy from one place to another.  Exam ELC 3.6 | 3.4 Component 4 Chemistry  Chemistry in our world  Acids react with metals, alkalis and bases to produce compounds known as salts. Many chemical reactions produce a change in temperature. Chemical reactions can be made to go faster or slower by changing the conditions. The Earth’s atmosphere has changed over billions of years. Human activities increase the amounts of some substances in the atmosphere. Water that is safe to drink is essential for human health.  Exam ELC 3.4 | 3.2 Component 2 Biology  Environment, evolution and inheritance  Life on Earth is dependent on photosynthesis to fix carbon dioxide and produce the organic molecules used as the fuels for respiration and life processes.  Living organisms interact with one another and their environment in many different ways. Human behaviours may have beneficial or detrimental effects on natural populations and the environment. The chemicals in the environment are continually cycling through the natural world.  Life on Earth has evolved over time by natural selection, which accounts for biodiversity and how organisms are related. The characteristics of living things depend on both their environment and their genome.  Humans can now use genetic engineering to modify organisms.  Exam ELC 3.2  GCSE Double award Group 7 |