Science

Curriculum Principles

Our uniting 'sentence' is: "The science department instilled a passion for science in every student that empowered them to make a positive contribution and pursue a sustainable career within the STEM industries".

By the end of their education, a student of Science at Dixons Unity Academy will:

- Know fundamental scientific principles from biology, chemistry and physics that will provide a foundation for understanding and navigating the world. Student knowledge is structured around the big ideas in science which range from the particulate nature of matter, the cellular basis of living organisms, to the structure of the universe.
- Understand the processes of scientific inquiry that leads to the creation and development of concepts and theories. Students will understand how science can be used to explain observations and make predictions about natural phenomena.

To achieve a true understanding of Science, topics have been intelligently sequenced based on the following rationale:

- Scientific knowledge is broadly hierarchical in nature – students must have a secure understanding of each key block of knowledge before progressing onto the next stage. Therefore, to support this, topics have been meticulously planned and ordered to ensure that students are always building on and deepening their previous learning.
- In biology, primary students are introduced to different animals (including humans), further animals and plants and their life processes. From year 7 students learn about the structure, function, and behaviour of living organisms in detail, building up from the microscopic cellular level to the macro-scale interactions in an ecosystem. These topics are then extended with the expectation that students learn to apply this knowledge and make links with other topics.
- In chemistry, primary students are introduced to the properties of everyday materials. Students explore ideas such as floating, sinking and melting. They investigate different materials and their uses, before moving onto more abstract concepts such as solubility, conductivity, and changes of state. From year 7, students start with a rigorous grounding in the fundamentals of secondary level chemistry: states of matter, the periodic table, chemical reactions, and the behaviour of materials. Having mastered the foundation knowledge, students are fully equipped with the necessary knowledge and skills to tackle the more challenging content, such as chemical bonding and quantitative chemistry.
- In physics, primary students are introduced to the fundamentals of forces, electricity, sound, light and space – focusing on concrete concepts and experiences. These topics are taught explicitly and then revisited in more depth throughout. From year 7 students continue to study these topics, as well as introducing more challenging concepts such as energy, pressure, and density. As they continue to study these topics in more detail the focus shifts to a more quantitative appreciation of the subject matter and mathematical skills.
- Experimental work is a key feature of science, and at the start of Y7 'working scientifically' skills are taught explicitly. The disciplinary knowledge and skills have been carefully mapped across all topics throughout all years so that students are given many opportunities to apply and develop these concepts. For example, each topic deliberately includes several opportunities to revisit graph and table interpretation skills.

The Science curriculum will address social disadvantage by addressing gaps in students' knowledge and skills":

- Our curriculum is designed around the most disadvantaged learners. We are careful not to assume any prior knowledge or cultural capital and always teach new knowledge explicitly.
- The Education Endowment Foundation published a major report in 2017 examining the disadvantaged attainment gap in science. The strongest factor affecting pupils' science scores is their literacy levels. In our department, we actively promote literacy every lesson through reading, annotating and discussing challenging texts. We also support children to answer questions in full sentences by verbally modelling sentence starters, giving adequate thinking time and allowing children to 'turn and talk' with a partner. We plan frequent extended writing tasks and support children with verbal rehearsal activities, sentence starters and keywords.
- Disadvantaged students, and those from identified underrepresented groups, receive priority when teachers create and implementing their Intervention Prevention plans. Disadvantaged students are also always prioritised when selecting students for small group trips to museums and universities and for science competitions. At GCSE level, students are provided with suitable revision resources (e.g. revision guides and stationary) to give all students a fair opportunity to be successful.
- All students are taught the same rigorous curriculum. Although students at secondary level are taught in groups, we have the same high expectations of all students – we do not narrow or dilute the curriculum. All students are taught from the same student work booklets so that everyone is given access to the same powerful and catalytic knowledge. Teachers understand the need to supplement the work booklets with additional practice/scaffolds or extension material, as required for individual students.
- Students with special educational needs or disabilities are given extra support using evidence-based strategies to promote learning and retention. In some cases, students are supported by Learning Support Assistants in lessons. Students are taught in small groups so that individual needs can be catered for. Students with profound barriers to learning receive additional teaching and practice of core concepts to achieve mastery. Students have access to a rich and diverse curriculum focussing on key skills and powerful

knowledge delivered with the appropriate scaffolding and challenge to ensure all pupils master the entire curriculum. Students who are new to English receive support with vocabulary and literacy.

We fully believe that Science can contribute to the personal development of students at Dixons Unity Academy:

- The social development of our students is nurtured through the explicit teaching and practice of effective teamwork and communication skills when working in groups for scientific investigations. Groups are selected by the teacher to ensure that students learn to effectively collaborate with others from different backgrounds or from outside of their friendship circle.
- Science naturally provides many opportunities for balanced discussions of moral and ethical issues. For example, we explore the moral complexities of organ transplant, the controversial use of genetic engineering and the disputed use of stem cells for disease treatment. Students are given time to discuss these issues both in pairs and as a class to allow students to develop spiritually.
- When teaching topics such as the theory of evolution and the Big Bang theory, this provides a chance to develop students' cultural awareness as we can discuss viewpoints of these theories from different religions and cultures. We also discuss historical sexism in scientific developments – for example, the famous case of Rosalind Franklin's discovery of the structure of DNA.
- Science lessons also provide a wealth of opportunities to explore personal development relating to physical and mental health. For example, students study the effects of smoking, drugs, and alcohol from both a scientific and social perspective. When teaching about the digestive system, students are taught about the importance of a balanced diet and how to interpret nutritional information.
- We want students to become respectful and responsible citizens who contribute positively to society. For example, students are taught in detail about global warming, pollution, and energy resources so that they understand the importance of recycling, reducing waste and cutting down their carbon footprint.
- Our science curriculum contributed to the whole academy anti-racism agenda. We ensure that we teach about prominent scientific figures that are representative of all cultures and ethnicities, for example George Washington Carver and Henrietta Lacks.

Our belief is that homework should be interleaved revision of powerful knowledge that has been modelled and taught in lessons. This knowledge is recalled and applied through a range of low stakes quizzing and practice.

Opportunities are built in to make links to the world of work to enhance the careers, advice, and guidance that students are exposed to:

- Topics in KS3 and KS4 have a 'careers spotlight', where students will explore a profession linked to that unit of work. For example, when Y8 students study chemical reactions, they learn about careers in chemical engineering.
- Problem solving activities are built into the curriculum that allow students to apply scientific knowledge to certain career-based scenarios. For example, when learning about health and disease, students have to write an explanation to a patient from the point of view of a doctor explaining why they are prescribing painkillers rather than antibiotics.
- We aim to work collaboratively with our local community to show the career opportunities available to our students within science in our city.

A true love of science involves learning about various cultural domains. We teach beyond the specification requirements, but do ensure students are well prepared to be successful in GCSE examinations:

- Opportunities to explore the history and philosophy of science are embedded into the curriculum. For example reading rich texts about an array of topics, such as: the history of space exploration, Semmelweis' work on Germ Theory and how new chemical elements get their names. Whilst not examined, they are included for engagement and to build cultural capital.
- Disciplinary knowledge is critical to a thorough understanding of how new scientific knowledge is acquired and is rigorously tested before being accepted by the scientific community. We also believe it is essential that all students can plan and carry out practical's using laboratory equipment safely and accurately so that they are prepared for future study and employment in STEM careers. In KS3, we want students to be exposed to a wide variety of engaging practical's, such as investigations into the effectiveness of different brands of indigestion tablets and finding the best metal for making frying pans. In KS4 there is a greater focus on the GCSE Required Practical's – but we are not restricted to this list of experiments or methods.

Curriculum Overview

All children are entitled to a curriculum and to the powerful knowledge which will open doors and maximise their life chances. Below is a high-level overview of the critical knowledge children will learn in this subject, at each key stage from Year 7 through to Year 11, to equip students with the cultural capital they need to succeed in life. Our powerful, knowledge-rich curriculum teaches both **substantive knowledge** (facts; knowing that something is the case; what we think about) and **procedural knowledge** (skills and processes; knowing how to do something; what we think with). There are no skills without bodies of knowledge to underpin them. The curriculum is planned vertically and horizontally giving thought to the optimum knowledge sequence for building secure schema.

		Cycle 1	Cycle 2	Cycle 3
YEAR 7	**New learning**	**Science skills** Development of scientific theories; planning an investigation and displaying and analysing results; bouncing balls investigation (these skills are embedded in all future topics from year 7 – 11) **Cells and life processes** Plant and animal cells; using a microscope to view cells; specialised cells; unicellular organisms; introduction to respiration, photosynthesis and diffusion Forces and space. **Forces and space** Force diagrams; resultant forces; balanced and unbalanced forces; air resistance investigation; the solar system; day/night and seasons	**Particles and solutions** Solids, liquids and gases; changes of state; dissolving; solubility; separating mixtures; rock salt investigation **Energy** Energy stores and transfer pathways; law of conservation of energy; efficiency; advantages and disadvantages of renewable and non-renewable energy resources and heat energy transfer investigation.	**Elements** Atoms; elements, compounds and mixtures; the periodic table; chemical formulae; properties of metals and non-metals and introduction to chemical reactions **Ecology** Competition in ecosystems; adaptations of plants and animals; food chains and webs; pyramids of numbers and classification **Acids and alkalis** pH scale; indicators; neutralisation reactions; indigestion tablet investigation and making salts practical. **Waves** Behaviour of sound waves; amplitude and frequency; oscilloscope traces; hearing and the ear. Behaviour of light waves; reflection, refraction and dispersion investigations; colours of light; seeing and the eye.
	Revisited learning	Science skills builds on how science works skills previously taught through investigations. Cells and life processes builds on previous knowledge from the Animals (including Humans) topics.	Specialised cells and life processes, forces cause an energy transfer, science skills applied to investigations.	States of matter applied to elements topics, life processes, space linked to sound waves, science skills applied to investigations.
	National curriculum links	Working scientifically Structure and function of living organisms Motion and forces	The particulate nature of matter Energy Structure and function of living organisms	Periodic table Material cycles and energy Interactions / interdependencies The particulate nature of matter Waves Energy
	Health Curriculum	**Reproduction** Puberty; reproductive systems; pregnancy; parts of a flower and plant reproduction	**Nutrition** Understanding food safety; balanced diets; preparing healthy food; understanding specialist diets.	**Healthy Choices** Sleep; diet and exercise; smoking and vaping; vaccinations; meeting needs of individuals; physical, mental and social health.
	Additional information	Careers in aeronautical engineering (forces and space topic)	Careers in midwifery (reproduction topic)	Careers in veterinary medicine / nursing (ecology topic)

		Cycle 1	Cycle 2	Cycle 3
YEAR 8	**New learning**	**Metals** Properties of metals; reactions of metals and reactivity series; extraction of metals from ores and recycling metals **Forces and motion** Weight, mass and gravity; Hooke's law theory and investigation; speed calculations and distance-time graphs	**Plants** Photosynthesis; structure of leaves; plant roots and minerals; fertilisers; bioaccumulation and testing leaves for starch **Chemical reactions** Chemical equations; rates of reaction theory and investigations; conservation of mass and exo/endothermic reactions **Electricity and magnetism** Circuit components and diagrams; series and parallel circuit theory and investigation; current, voltage and resistance; magnets; magnetic fields and electromagnets	**Inheritance and variation** DNA and genetics; environmental and inherited variation; natural selection and extinction **Pressure density and moments** Pressure and calculations; density and calculations; calculating moments; application to real life challenges. **Environmental chemistry** Burning fuels theory and investigation; Earth's changing atmosphere; global warming; acid rain and water cycle
	Revisited learning	Cells and life processes, metal and non-metal properties, year 7 forces knowledge is further developed, science skills applied to investigations.	Specialised cell knowledge is developed, photosynthesis, ecology year 7 simple chemical reactions and electricity and magnetism knowledge is further developed, science skills applied to investigations.	Cell structure, chemical reactions, forces knowledge from year 7, science skills applied to investigations.
	National curriculum links	Structure and function of living organisms The particulate nature of matter Motion and forces	Structure and function of living organisms Material cycles and energy The particulate nature of matter Chemical reactions Energy	Genetics and evolution The particulate nature of matter Chemical reactions Earth and atmosphere
	Health Curriculum	**The Body** Skeletal system; muscular system; food groups; digestive system; respiratory system; circulatory system; the heart and exercise	**Healthy Choices** Personal health; diet and happiness; dental hygiene; sleep; puberty; periods; fitness; types of training.	**Nutrition** Developing a recipe bank; developing practical skills; developing understanding of international foods
	Additional information	Careers in medicine / nursing (the body topic)	Careers in chemical engineering (chemical reactions topic)	Careers in medicine / nursing (inheritance topic)
YEAR 9	**New learning**	**Atomic structure and periodic table** Development and current model of the atom; group 1; 7 and 0 elements; properties of metals and non-metals **Cell biology** Structure of eukaryotic and prokaryotic cells; cell division; advantages and disadvantages of stem cells; microscopy and cell transport (diffusion; active transport and osmosis) **Particle model of matter** States of matter; changes of state; density; internal energy; energy transfers and gas pressure	**Bonding and structure** Ionic; covalent and metallic bonding; solids; liquids and gases and properties of substances **Organisation** Organ systems in plants and animals **Atomic structure** Model of an atom; radioactive decay and nuclear radiation	**Infection and response** Pathogens; spread and prevention of infection; immune response and treatment of infectious diseases. **Chemistry of the atmosphere** Composition and evolution of the Earth's atmosphere; greenhouse gases and pollutants

		Cycle 1	Cycle 2	Cycle 3
	Revisited learning	Builds on year 7 and 8 knowledge of cells and life processes, periodic table, elements, compounds, mixtures, chemical equations and separation techniques. Science skills continue to be embedded.	Builds on year 7 and 8 knowledge of body systems and life processes, properties of matter and states of matter. Science skills continue to be embedded.	Builds on KS2 knowledge of infectious diseases, and year 7 and 8 knowledge of the Earth's atmosphere and burning fossil fuels. Science skills continue to be embedded.
	National curriculum links	Cell biology Atomic structure and the periodic table The structure of matter	Transport systems Structure bonding and the properties of matter Atomic structure	Health disease and the development of medicines Earth and atmospheric science
	Additional information	Careers in microbiology (cell biology topic)	Careers in plant science and horticulture (organisation topic)	Careers in pharmacology (infection and response topic)
YEAR 10	**New learning**	**Energy** Energy changes in a system involving heating, doing work using forces, or doing work using an electric current. Calculating the stored energies and energy changes involved, calculating efficiency and renewable and non-renewable energy resources. **Bioenergetics** Respiration and photosynthesis **Energy changes in reactions** Exothermic and endothermic reactions	**Electricity** Circuit components; current; potential difference; resistance; I-V graphs; mains electricity and national grid **Chemical changes** Reactivity of metals and acids; pH and electrolysis **Homeostasis and response** Regulation of internal conditions; nervous and endocrine systems and hormones and fertility **Quantitative chemistry** Chemical measurement; conservation of mass; chemical calculations and concentration	**Chemical analysis** Purity; formulations; chromatography and gas tests **Forces** Scalars and vectors; types of forces; resultant forces; work done; Hooke's law; Newton's laws; speed; acceleration; motion graphs; stopping distances and momentum
	Revisited learning	Builds on knowledge of life processes, chemical reactions, atomic structure from the chemistry topic. Science skills continue to be embedded	Builds on previous knowledge of cellular processes, chemical reactions, electricity. Science skills continue to be embedded	Builds on previous knowledge of separating techniques and simple force and motion knowledge. Science skills continue to be embedded.
	National curriculum links	Energy Photosynthesis Energy changes in chemistry	Electricity Chemical change Coordination and control	Chemical changes Chemical analysis Forces Forces and motion
	Additional information	Careers in medicine / nursing (radiation topic)	Careers in electrical engineering (electricity topic)	Careers in forensic science (chemical analysis topic) Careers in mechanical engineering (forces topic)

		Cycle 1	Cycle 2	Cycle 3
YEAR 11	**New learning**	**Inheritance; variation and evolution** Reproduction; meiosis; genetics; selective breeding; genetic engineering; classification **Forces** Scalars and vectors; types of forces; resultant forces; work done; Hooke's law; Newton's laws; speed; acceleration; motion graphs; stopping distances and momentum. **Waves** Transverse and longitudinal waves; properties of waves; uses and applications of electromagnetic waves.	**Ecology** Adaptation; interdependence; competition; biodiversity and human effects **Rate and extent of chemical change** Rate of reaction; catalysts; reversible reactions and dynamic equilibrium **Homeostasis and response** Regulation of internal conditions; nervous and endocrine systems and hormones and fertility **Magnetism and electromagnetism** Permanent and induced magnetism; magnetic fields; motor effect	**Using Resources** Potable water; life cycle assessments and recycling **Chemical analysis** Purity; formulations; chromatography and gas tests
	Revisited learning	Builds on knowledge of life processes, reproduction and inheritance, simple forces and motion and sound and light waves. Science skills continue to be embedded.	Builds on previous knowledge of ecology, chemical reactions, Cellular reactions and organ systems and magnets and magnetic fields. Science skills continue to be embedded.	Builds on previous knowledge of metal recycling and separation techniques. Science skills continue to be embedded.
	National curriculum links	Evolution variation and inheritance Chemical analysis Wave motion	Ecosystems Rate and extent of chemical change Homeostasis and response Magnetism and electromagnetism	Chemical and allied industries Chemical analysis
	Additional information	Careers in mechanical and automotive engineering (forces topic)	Careers in medicine / nursing (homeostasis topic)	Careers in manufacturing engineering (using resources topic)

Y7 Long Term Plan

Science

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
C1	**Induction**						**Assessment Weeks**						
	Orientation	Science Skills	Science Skills	Science Skills	Cells & Life Processes	Cells & Life Processes	Cells & Life Processes	Forces & Space	Forces & Space	Forces & Space	Particles & Solutions	Particles & Solutions	Particles & Solutions
C2							**Assessment Weeks**						
	Energy	Energy	Energy	Energy	Energy	Mid-year assessments	Mid-year assessments	Atoms & Elements	Atoms & Elements	Atoms & Elements	Atoms & Elements	Ecology	Ecology
C3									**Assessment Weeks**				
	Ecology	Ecology	Acids & Alkalis	Acids & Alkalis	Acids & Alkalis	Acids & Alkalis	Revision	Revision and assessment	Revision and assessment	Earth, Materials and the atmosphere	Earth, Materials and the atmosphere	Earth, Materials and the atmosphere	Earth, Materials and the atmosphere

Health

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
C1	**Induction**						**Assessment Weeks**						
	Introduction and overview	Food safety and hygiene	Eatwell plate and balanced diets	Origins of foods	Preparing a dish	Analysing food choices	Analysing a recipe	Understanding food and health	Needs of specific groups	Environmental issues	Preparing a dish	Understanding allergies	Modifying a chosen recipe
C2							**Assessment Weeks**						
	Puberty	Puberty	Male reproductive system	Male reproductive system	Female reproductive system	Female reproductive system	The menstrual cycle	The menstrual cycle	Fertilisation	Development of a foetus	Development of a foetus	Healthy diet for pregnancy	Healthy diet for pregnancy
C3									**Assessment Weeks**				
	Sleep hygiene	Healthy routines	Smoking and vaping	Mental Health and Sport	Nutrition	Vaccinations	Understanding needs of participants	Physical health	Mental Health	Social Health	Long-term health conditions	Barriers to participation	Removing barriers to participation

Y8 Long Term Plan

Science

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
C1	**Induction**						**Assessment Weeks**						
	Orientation	Metal Reactions	Metal Reactions	Metal Reactions	Metal Reactions	Revision and assessment	Revision and assessment	Forces & Motion	Forces & Motion	Forces & Motion	Forces & Motion	Forces & Motion	Plants and Photosynthesis
C2							**Assessment Weeks**						
	Plants and Photosynthesis	Plants and Photosynthesis	Chemical Reactions	Chemical Reactions	Chemical Reactions	Chemical Reactions	Electricity & Magnetism	Electricity & Magnetism	Electricity & Magnetism	Electricity & Magnetism Electricity & Magnetism	Variation and Inheritance	Variation and Inheritance	Variation and Inheritance
C3									**Assessment Weeks**				
	Variation and Inheritance	Pressure density and moments	Pressure density and moments	Pressure density and moments	Pressure density and moments	Revision	Revision and assessment	Revision and assessment	Revision and assessment	Earth, Materials and the atmosphere	Earth, Materials and the atmosphere	Earth, Materials and the atmosphere	Earth, Materials and the atmosphere

Health

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
C1	**Induction**						**Assessment Weeks**						
	Skeletal System	Joints	Muscles	Nutrition	Nutrition	The digestive system	The digestive system	The respiratory system	The respiratory system	Gaseous Exchange	Gaseous exchange	The Circulatory System	The Heart and Exercise
C2							**Assessment Weeks**						
	Personal responsibility for health	Diet and happiness	Dental hygiene	Ensuring a good nights sleep	Sleep and mental health	Diet and mental health	Puberty	Periods and menstruation	Long-term fitness effects	Flexibility and Aerobic Training	Muscular Endurance Training	Muscular Strength and Power	Speed Training
C3									**Assessment Weeks**				
	Developing a recipe book	Energy balance	Developing practical skills	Developing a recipe book	Demonstrating baking skills	Developing a recipe book	Developing baking skills	Developing a recipe book	Creating an international dish	Developing a recipe book	Creating a vegetarian dish	Developing a recipe book	Developing a recipe book

Y9 Long Term Plan

Science

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
C1	**Induction**						**Assessment Weeks**						
	Orientation	C1 Atomic structure and the periodic table	C1 Atomic structure and the periodic table	C1 Atomic structure and the periodic table	C1 Atomic structure and the periodic table	B1 Cells	B1 Cells	B1 Cells	B1 Cells	P3 Particle Model of Matter	P3 Particle Model of Matter	P3 Particle Model of Matter	C2 Bonding and properties of matter
C2							**Assessment Weeks**						
	C2 Bonding and properties of matter	C2 Bonding and properties of matter	C2 Bonding and properties of matter	B2 Organisation	B2 Organisation	Revision and assessment	Revision and assessment	B2 Organisation	B2 Organisation	B2 Organisation	P4 Atomic Structure	P4 Atomic Structure	P4 Atomic Structure
C3									**Assessment Weeks**				
	B3 Infection and Response	B3 Infection and Response	B3 Infection and Response	B3 Infection and Response	B3 Infection and Response	Revision	Revision	Revision and assessment	Revision and assessment	C9 Chemistry of the Atmosphere	C9 Chemistry of the Atmosphere	C9 Chemistry of the Atmosphere	C9 Chemistry of the Atmosphere

Y10 Long Term Plan

Science

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
C1	**Induction**						**Assessment Weeks**						
	Orientation	P1 Energy	P1 Energy	P1 Energy	B4 Bioenergetics	Revision and assessment	Revision and assessment	B4 Bioenergetics	B4 Bioenergetics	B4 Bioenergetics	B4 Bioenergetics	C5 Energy Changes	C5 Energy Changes
C2							**Assessment Weeks**						
	P2 Electricity	P2 Electricity	P2 Electricity	P2 Electricity	P2 Electricity	C4 Chemical Changes	C4 Chemical Changes	C4 Chemical Changes	B5 Homeostasis	B5 Homeostasis	B5 Homeostasis	B5 Homeostasis	C3 Quantitative Chemistry
C3									**Assessment Weeks**				
	C3 Quantitative Chemistry	C3 Quantitative Chemistry	C8 Chemical Analysis	C9 Chemistry of the Atmosphere	C9 Chemistry of the Atmosphere	P5 Forces	P5 Forces	Revision and assessment	Revision and assessment	Revision and assessment	P5 Forces	P5 Forces	P5 Forces

Y11 Long Term Plan

Science

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
C1	**Induction**						**Assessment Weeks**						
	Orientation	B6 Inheritance, variation and evolution	B6 Inheritance, variation and evolution	B6 Inheritance, variation and evolution	B6 Inheritance, variation and evolution	B6 Inheritance, variation and evolution	C7 Organic Chemistry	C7 Organic Chemistry	P6 Waves	MOCKS	MOCKS	P6 Waves	P6 Waves
C2							**Assessment Weeks**						
	P6 Waves	B7 Ecology	B7 Ecology	B7 Ecology	C6 Rates of Reaction	C6 Rates of Reaction	C6 Rates of Reaction	C6 Rates of Reaction	MOCKS	MOCKS	P7 Magnets and electromagnets	P7 Magnets and electromagnets	C10 Using Resources
C3									**Assessment Weeks**				
	C10 Using Resources	C10 Using Resources	GCSE preparation	GCSE preparation									