

Teaching guide: two teachers, two years

This is a plan for teaching GCSE Combined Science: Synergy from our new draft specification (8465). First teaching starts in 2016 Autumn term and first exam is in 2018 Summer term. This is a two-year plan based on two teachers having a total of 4 hours of teaching time per week. The abbreviation RP indicates a required practical.

Year 1

Teacher A:

- Unit 1 Building blocks
- Unit 2 Transport over larger distances
- Unit 3 Interactions with the environment

Teacher B:

- Unit 5 Building blocks for understanding
- Unit 6 Interactions over small and large distances
- Unit 7 Movement and interactions

Autumn term 2016: 14 weeks

Teacher A		Teacher B	
Topic and time (hours)	Teaching and learning links	Topic and time (hours)	Teaching and learning links
4.1.1 States of matter (6) RP1 and RP2	<ul style="list-style-type: none"> • Atomic structure • Systems in the body • The periodic table 	4.5.1 The periodic table (5)	<ul style="list-style-type: none"> • Atomic structure • Structure and bonding • Acids and alkalis • The rate and extent of chemical change
4.1.2 Atomic structure (3)	<ul style="list-style-type: none"> • States of matter • The periodic table • Structure and bonding 	4.5.2 Chemical quantities (9)	<ul style="list-style-type: none"> • Atoms into ions and ions into atoms • Carbon chemistry • Resources of materials
4.1.3 Cells in animals and plants (8.5) RP3	<ul style="list-style-type: none"> • Systems in the body • Inheritance 	4.6.1 Forces and energy changes (12) RP9	<ul style="list-style-type: none"> • Magnetism and electromagnetism • Forces and motion
4.1.4 Waves (5)	<ul style="list-style-type: none"> • The Earth's atmosphere 		

Teacher A		Teacher B	
Topic and time (hours)	Teaching and learning links	Topic and time (hours)	Teaching and learning links
	<ul style="list-style-type: none"> Radiation and risk States of matter 		

Spring term 2017: 13 weeks

Teacher A		Teacher B	
Topic and time (hours)	Teaching and learning links	Topic and time (hours)	Teaching and learning links
4.2.1 Systems in the human body (16) RP4	<ul style="list-style-type: none"> Cells in animals and plants The rate and extent of chemical change 	4.6.1 Forces and energy changes (4)	<ul style="list-style-type: none"> Magnetism and electromagnetism Forces and motion
4.2.2 Plants and photosynthesis (8) RP5 and RP6	<ul style="list-style-type: none"> Cells in animals and plants The Earth's atmosphere Ecosystems and biodiversity 	4.6.2 Structure and bonding (7)	<ul style="list-style-type: none"> States of matter Atomic structure The periodic table Atoms into ions and ions into atoms Carbon chemistry
		4.6.3 Magnetism and electromagnetism (6)	<ul style="list-style-type: none"> Forces and energy changes Forces and motion Electricity
		4.7.1 Forces and motion (5) RP10	<ul style="list-style-type: none"> Magnetism and electromagnetism

Summer term 2017: 12 weeks

Teacher A		Teacher B	
Topic and time (hours)	Teaching and learning links	Topic and time (hours)	Teaching and learning links
4.3.1 Lifestyle and health (12)	<ul style="list-style-type: none"> Systems in the human body The rate and extent of chemical change 	4.7.2 Electricity (14) RP11 and RP12	<ul style="list-style-type: none"> Forces and energy changes Magnetism and electromagnetism
4.3.2 Radiation and risk (7)	<ul style="list-style-type: none"> Atomic structure Waves 	4.7.3 Acids and alkalis (7) RP13	<ul style="list-style-type: none"> The periodic table

Teacher A		Teacher B	
Topic and time (hours)	Teaching and learning links	Topic and time (hours)	Teaching and learning links
4.3.3 Preventing, treating and curing diseases (5)	<ul style="list-style-type: none"> Lifestyle and health Waves 		<ul style="list-style-type: none"> Chemical quantities

Year 2

Teacher A:

- Unit 3 Interactions with the environment continued
- Unit 4 Explaining change

Teacher B:

- Unit 7 Movement and interactions continued
- Unit 8 Guiding spaceship Earth to a sustainable future

Autumn term 2017: 14 weeks

Teacher A		Teacher B	
Topic and time (hours)	Teaching and learning links	Topic and time (hours)	Teaching and learning links
4.3.3 Preventing, treating and curing diseases (15)	<ul style="list-style-type: none"> Lifestyle and health Waves 	4.7.4 The rate and extent of chemical change (11) RP14 and RP15	<ul style="list-style-type: none"> The periodic table Chemical quantities Systems in the human body
4.4.1 The Earth's atmosphere (10) RP7	<ul style="list-style-type: none"> Plants and photosynthesis Carbon chemistry Resources of materials and energy 	4.7.5 Atoms into ions and ions into atoms (5) RP16	<ul style="list-style-type: none"> The periodic table Chemical quantities
4.4.2 Ecosystems and biodiversity (7) RP8	<ul style="list-style-type: none"> Waves Plants and photosynthesis Carbon chemistry Resources of materials and energy 	4.8.1 Carbon chemistry (12)	<ul style="list-style-type: none"> The periodic table Chemical quantities Structure and bonding The Earth's atmosphere Ecosystems and biodiversity

Spring term 2018: 11 weeks

Teacher A		Teacher B	
Topic and time (hours)	Teaching and learning links	Topic and time (hours)	Teaching and learning links
4.4.3 Inheritance (5)	<ul style="list-style-type: none">Cells in animals and plantsVariation and evolution	4.8.2 Resources of materials and energy (8)	<ul style="list-style-type: none">The Earth's atmosphereEcosystems and biodiversity
4.4.4 Variation and evolution (7)	<ul style="list-style-type: none">InheritanceThe rate and extent of chemical change		<ul style="list-style-type: none">The periodic tableAtoms into ions and ions into atoms
Revision			

Summer term 2018 – first exam.