Sparx Science Topic Codes

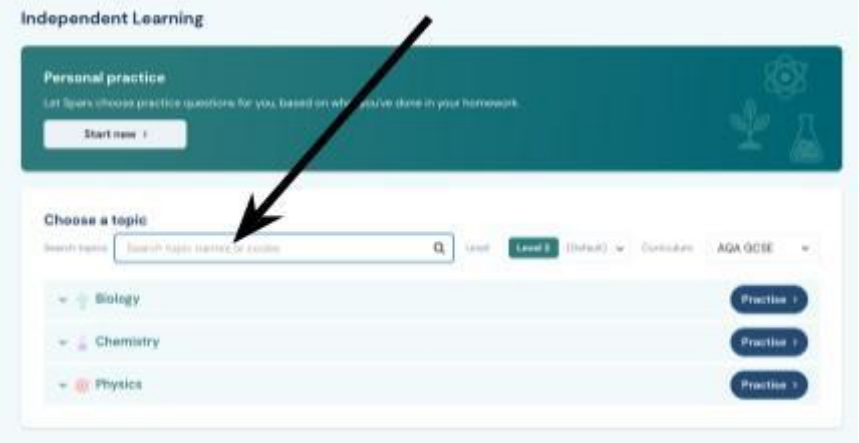
Guide to use

Sparx Codes

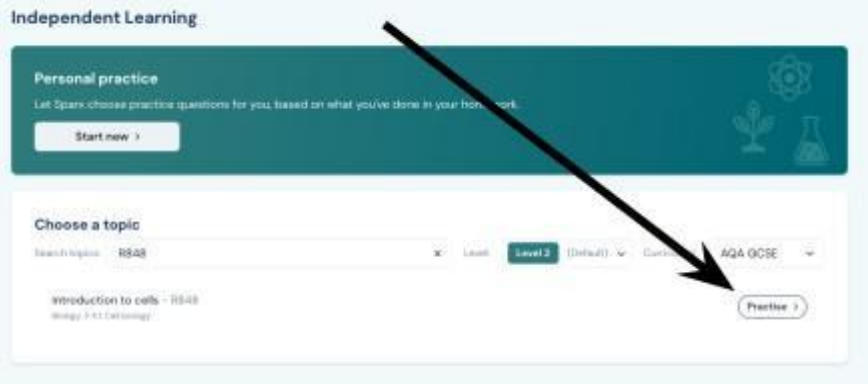
All topics in Sparx have a unique code. These can be used to search independent learning and practice these topics.

To revise a specific topic from a paper:

1. Find the **Sparx Code for that topic** in the list below
2. Log into Sparx Science and click "Independent Learning"
3. Type the code into the *Search Topics* bar:



4. Click practise



Sparx Science Topic Codes

AQA Combined science: HT Paper 1 revision list

Sparx Learning

Unit	Topic	Sparx Code	Spec Code	Completed?
4.1: Cell biology	Introduction to cells	R848	4.1.1.1, 4.1.1.2	☐
	Microscopy	R878	4.1.1.5	☐
	Calculating magnification	R585	4.1.1.5	☐
	Stem cells	R478	4.1.2.3	☐
	Osmosis	R949	4.1.3.2	☐
	Calculations involving osmosis	R685	4.1.3.2	☐
	Practical: Osmosis	R110	RP	☐
4.2: Organisation	The human digestive system	R154	4.2.2.1	☐
	Enzymes	R667	4.2.2.1	☐
	Factors affecting enzymes	R800	4.2.2.1	☐
	Rate calculations and enzyme activity	R615	4.2.2.1	☐
	Enzymes and digestion	R244	4.2.2.1	☐
	The heart	R806	4.2.2.2	☐
	The structure of blood vessels	R350	4.2.2.2	☐
	The lungs	R652	4.2.2.2	☐
	The composition of blood	R673	4.2.2.3	☐
	The structure of the leaf	R451	4.2.3.1, 4.2.3.2	☐
	Plant tissues and organ systems	R318	4.2.3.1, 4.2.3.2	☐
	The xylem and phloem	R419	4.2.3.1, 4.2.3.2	☐
	Transpiration	R973	4.2.3.2	☐
	Factors affecting transpiration	R600	4.2.3.2	☐
	Translocation	R547	4.2.3.2	☐
4.3: Infection and response	Communicable diseases	R329	4.3.1.1	☐
	Preventing the spread of disease	R417	4.3.1.1	☐
	Bacterial diseases	R421	4.3.1.3	☐
	Diseases caused by fungi and protists	R875	4.3.1.4, 4.3.1.5	☐
	Human defence system	R566	4.3.1.6	☐
	The immune system	R582	4.3.1.6	☐
	Vaccination	R938	4.3.1.7	☐
	Antibiotics and painkillers	R328	4.3.1.8	☐
	Development of drugs	R781	4.3.1.9	☐
4.4: Bioenergetics	Factors affecting photosynthesis	R732	4.4.1.2	☐
	Light and photosynthesis	R979	4.4.1.2	☐

	Practical: Photosynthesis	R248	RP	☐
	Aerobic respiration	R336	4.4.2.1	☐
	Respiration and exercise	R545	4.4.2.2	☐
	Anaerobic respiration	R268	4.4.2.3	☐
	Metabolism	R434	4.4.2.3	☐
4.1: Atomic structure and the periodic table	Elements and compounds	R447	4.1.1.1	☐
	Word equations	R333	4.1.1.1	☐
	Formulae of common ions and compounds	R711	4.1.1.1	☐
	Ionic equations	R671	4.1.1.1	☐
	The development of the atomic model	R793	4.1.1.3	☐
	Atomic structure	R945	4.1.1.4, 4.1.1.5	☐
	Atomic number and mass number	R646	4.1.1.5	☐
	Isotopes	R365	4.1.1.5	☐
	Electron configuration	R293	4.1.1.7	☐
	Halogens	R580	4.1.2.6	☐
	Reactions of halogens	R715	4.1.2.6	☐
	Displacement reactions involving halogens	R640	4.1.2.6	☐
4.2: Bonding, structure and the properties of matter	Ionic bonding	R868	4.2.1.1, 4.2.1.2, 4.2.1.3	☐
	Dot and cross diagrams for ionic compounds	R581	4.2.1.2	☐
	Ions	R199	4.2.1.2	☐
	Covalent bonding	R467	4.2.1.1, 4.2.1.4	☐
	Simple covalent molecules	R283	4.2.1.4	☐
	Large covalent structures	R916	4.2.1.4	☐
	Limitations of ionic and covalent models	R677	4.2.1.3, 4.2.1.4	☐
	Metallic bonding	R928	4.2.1.1, 4.2.1.5	☐
	State symbols	R272	4.2.2.2	☐
	Properties of large covalent structures	R338	4.2.2.5, 4.2.2.6	☐
	Properties of metals	R444	4.2.2.7, 4.2.2.8	☐
	Metals and alloys	R596	4.2.2.7	☐
4.3: Quantitative chemistry	Conservation of mass	R533	4.3.1.1, 4.3.1.3	☐
	Relative formula mass	R195	4.3.1.2	☐
	Calculations using percentage composition	R497	4.3.1.2	☐
	Calculations with moles	R223	4.3.2.1, 4.3.2.2	☐

	Calculating masses from equations using molar calculations	R624	4.3.2.2	☐
	Balancing equations using molar calculations	R143	4.3.2.3	☐
	Concentrations	R807	4.3.2.5	☐
4.4: Chemical changes	The reactivity series	R981	4.4.1.2	☐
	Extracting metals	R483	4.4.1.3	☐
	Acids and alkalis	R529	4.4.2.4	☐
	Introduction to electrolysis	R298	4.4.3.1	☐
	Electrolysis of molten compounds	R672	4.4.3.2, 4.4.3.3	☐
	Electrolysis of aqueous solutions	R279	4.4.3.4	☐
	Practical: Electrolysis	R866	RP	☐
	Oxidation and reduction in electrolysis	R792	4.4.3.1, 4.4.3.5	☐
4.5: Energy changes	Endothermic and exothermic reactions	R833	4.5.1.1	☐
	Practical: Temperature changes	R466	RP	☐
	Bond energy calculations	R769	4.5.1.3	☐
4.1: Energy	Kinetic energy	R704	4.1.1.2	☐
	Elastic potential energy	R802	4.1.1.2	☐
	Gravitational potential energy	R751	4.1.1.2	☐
	Thermal energy	R544	4.1.1.3	☐
	Practical: Specific heat capacity	R251	RP	☐
	Power	R602	4.1.1.4	☐
	Conservation of energy	R606	4.1.2.1	☐
	Wasted energy	R384	4.1.2.1	☐
	Reducing wasted energy	R996	4.1.2.1	☐
	Efficiency	R666	4.1.2.2	☐
	Improving efficiency	R593	4.1.2.2	☐
	Energy demands	R496	4.1.3	☐
	Non-renewable energy resources	R911	4.1.3	☐
	Renewable energy resources	R476	4.1.3	☐
4.2: Electricity	Introduction to series and parallel circuits	R955	4.2.1.1	☐
	Ohm's law	R779	4.2.1.3	☐
	Resistance in devices	R959	4.2.1.4	☐
	LDRs and thermistors	R658	4.2.1.4	☐
	Testing components	R238	4.2.1.4	☐
	AC and DC	R499	4.2.3.1	☐

	Mains electricity	R121	4.2.3.2	☐
	Dangers of mains electricity	R361	4.2.3.2	☐
	Power in circuits	R773	4.2.4.1	☐
	Energy transfers in circuits	R490	4.2.4.2	☐
	Power and energy transfer	R815	4.2.4.2	☐
	Power of devices	R145	4.2.4.2	☐
	Power ratings of appliances	R144	4.2.4.2	☐
4.3: Particle model of matter	Density	R136	4.3.1.1	☐
	States of matter	R252	4.3.1.1	☐
	The particle model and density	R161	4.3.1.1	☐
4.4: Atomic structure	Types of radiation	R937	4.4.2.1	☐
	Properties of radiation	R694	4.4.2.1	☐
	Nuclear equations	R193	4.4.2.2	☐
	Activity and decay	R549	4.4.2.1	☐
	Half-life	R905	4.4.2.3	☐
	Contamination and irradiation	R661	4.4.2.4	☐

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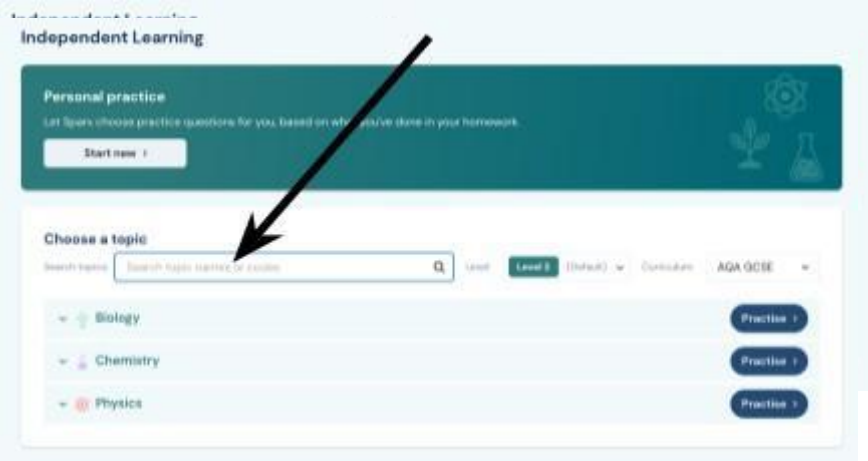

Sparx Science Topic Codes

AQA Combined science: FT Paper 1 revision list

Sparx Learning

Unit	Topic	Sparx Code	Spec Code	Completed?
4.1 Cell Biology	Introduction to cells	R848	4.1.1.1, 4.1.1.2	☐
	Prokaryotic and eukaryotic cells	R489	4.1.1.1	☐
	Mitosis	R368	4.1.2.1	☐
	Stem cells	R478	4.1.2.3	☐
	Osmosis	R949	4.1.3.2	☐
	Calculations involving osmosis	R685	4.1.3.2	☐
	Practical: Osmosis	R110	RP	☐
4.2: Organisation	The human digestive system	R154	4.2.2.1	☐
	Enzymes	R667	4.2.2.1	☐
	Factors affecting enzymes	R800	4.2.2.1	☐
	Rate calculations and enzyme activity	R615	4.2.2.1	☐
	Enzymes and digestion	R244	4.2.2.1	☐
	Practical: Food tests	R647	RP	☐
	The heart	R806	4.2.2.2	☐
	The structure of blood vessels	R350	4.2.2.2	☐
	The lungs	R652	4.2.2.2	☐
	The composition of blood	R673	4.2.2.3	☐
	The structure of the leaf	R451	4.2.3.1, 4.2.3.2	☐
	Plant tissues and organ systems	R318	4.2.3.1, 4.2.3.2	☐
	The xylem and phloem	R419	4.2.3.1, 4.2.3.2	☐
4.3: Infection and response	Communicable diseases	R329	4.3.1.1	☐
	Preventing the spread of disease	R417	4.3.1.1	☐
	Diseases caused by fungi and protists	R875	4.3.1.4, 4.3.1.5	☐
	Human defence system	R566	4.3.1.6	☐
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4.4: Bioenergetics	Factors affecting photosynthesis	R732	4.4.1.2	☐
	Practical: Photosynthesis	R248	RP	☐
	Aerobic respiration	R336	4.4.2.1	☐
	Respiration and exercise	R545	4.4.2.2	☐
4.1: Atomic structure and the periodic table	Elements and compounds	R447	4.1.1.1	☐
	Word equations	R333	4.1.1.1	☐
	The development of the atomic model	R793	4.1.1.3	☐
	Atomic structure	R945	4.1.1.4, 4.1.1.5	☐
	Calculations involving isotopes	R330	4.1.1.6	☐
	Electron configuration	R293	4.1.1.7	☐
	Noble gases	R572	4.1.2.4	☐
	Ionic bonding	R868	4.2.1.1, 4.2.1.2, 4.2.1.3	☐

4.2: Bonding, structure and the properties of matter	Representing ionic compounds	R557	4.2.1.3	☐
	Covalent bonding	R467	4.2.1.1, 4.2.1.4	☐
	Simple covalent molecules	R283	4.2.1.4	☐
	Large covalent structures	R916	4.2.1.4	☐
	Limitations of ionic and covalent models	R677	4.2.1.3, 4.2.1.4	☐
	Metallic bonding	R928	4.2.1.1, 4.2.1.5	☐
	States of matter	R211	4.2.2.1	☐
	Properties of ionic compounds	R562	4.2.2.3	☐
	Metals and alloys	R596	4.2.2.7	☐
	Allotropes of carbon	R901	4.2.3.1, 4.2.3.2	☐
4.3: Quantitative chemistry	Conservation of mass	R533	4.3.1.1, 4.3.1.3	☐
	Relative formula mass	R195	4.3.1.2	☐
	Calculations using percentage composition	R497	4.3.1.2	☐
	Concentrations	R807	4.3.2.5	☐
4.4: Chemical changes	Reactions of metals	R681	4.4.1.1	☐
	Extracting metals	R483	4.4.1.3	☐
	Reactions of acids and metals	R828	4.4.2.1	☐
	Reactions of acids and bases	R142	4.4.2.2	☐
	Further reactions of acids	R495	4.4.2.1, 4.4.2.2	☐
	Preparing soluble salts using crystallisation	R885	4.4.2.3	☐
	Practical: Making salts	R412	RP	☐
	Acids and alkalis	R529	4.4.2.4	☐
	Introduction to electrolysis	R298	4.4.3.1	☐
	Electrolysis of molten compounds	R672	4.4.3.2, 4.4.3.3	☐
	Electrolysis of aqueous solutions	R279	4.4.3.4	☐
	Practical: Electrolysis	R866	RP	☐
4.5: Energy changes	Endothermic and exothermic reactions	R833	4.5.1.1	☐
	Practical: Temperature changes	R466	RP	☐
	Reaction profiles	R675	4.5.1.2	☐
4.1: Energy	Energy stores and transfers	R393	4.1.1.1	☐
	Calculations involving energy transfers	R180	4.1.1.1	☐
	Kinetic energy	R704	4.1.1.2	☐
	Elastic potential energy	R802	4.1.1.2	☐
	Gravitational potential energy	R751	4.1.1.2	☐
	Thermal energy	R544	4.1.1.3	☐
	Practical: Specific heat capacity	R251	RP	☐
	Conservation of energy	R606	4.1.2.1	☐
	Wasted energy	R384	4.1.2.1	☐
	Reducing wasted energy	R996	4.1.2.1	☐
	Efficiency	R666	4.1.2.2	☐
	Energy demands	R496	4.1.3	☐
	Non-renewable energy resources	R911	4.1.3	☐

	Renewable energy resources	R476	4.1.3	☐
4.2: Electricity	Circuit symbols	R780	4.2.1.1	☐
	Charge and current	R274	4.2.1.2	☐
	Ohm's law	R779	4.2.1.3	☐
	Resistance in devices	R959	4.2.1.4	☐
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	Testing components	R238	4.2.1.4	☐
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	Power of devices	R145	4.2.4.2	☐
	Power ratings of appliances	R144	4.2.4.2	☐
4.3 Particle model	Specific latent heat	R641	4.3.2.3	☐
	Heating and cooling graphs	R927	4.3.2.3	☐
4.4: Atomic structure	Atomic number and mass number	R548	4.4.1.2	☐
	Ionisation	R767	4.4.1.1, 4.4.1.2	☐
	Isotopes	R889	4.4.1.2	☐
	Properties of radiation	R694	4.4.2.1	☐
	Activity and decay	R549	4.4.2.1	☐
	Half-life	R905	4.4.2.3	☐