Seneca Units Year 9 Science

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You should have been given a class code by your teacher to access the correct course.

Purple topics are triple science **only** topics only

Term	topics	Seneca Course	Course code and title
Autumn 1	Atomic Structure - Chemistry	Combined science Chemistry FT and HT	Elements and compounds 1.1.1
			Mixtures 1.1.3
		Chemistry FT	RP separating mixtures 4.3.4
		Combined science Chemistry FT and HT	Model of the atom 1.1.4
		Chemistry FT and HT	Atom size 1.1.5
	Bonding	Chemistry FT and HT	States of matter 2.2.1
			Changing state 2.2.2
		Chemistry FT	Metals and Alloys 2.3.4
		Chemistry HT	Alloys and conductors 2.3.4
	Atmosphere	Combined science Chemistry FT	Proportions of gases in the atmosphere 9.1.1
		Chemistry FT	The early atmosphere 9.1.2
		Chemistry HT	Oxygen and Carbon dioxide in the atmosphere 9.1.2
	Cells	Combined science Biology FT and HT	Cell Biology 1.1.1-1.1.10
		Biology FT	Cell Biology 1.1.1-1.1.10

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		Biology HT	Cell Biology 1.1.1-1.1.14
	Cells and microbes	Combined science Biology FT and HT	Cell Biology 1.1.1-1.1.10
		Biology HT	Cell Biology 1.1.1-1.1.14
	Magnetism	Physics FT and HT	Magnetic materials 7.1.1 – 7.1.2
	Forces	Combined Science Physics FT	Velocity and speed vectors 5.1.1
		Combined Science Physics HT	Force diagrams 5.2.3
		Physics HT	Force diagrams 5.2.3
		Combined Science Physics FT and HT	Gravity 5.2.1
		Combined Science Physics HT	Basics of motion 3, 5.1.3
		Combined Science Physics FT and HT	Basics of motion 1, 5.1.1
		Combined Science Physics FT and HT	Resultant forces 5.2.2
		Combined Science Physics FT and HT	Stopping distance 5.3.2

Term	**topics**	**Seneca Course**	**Course code and title**
Autumn 2	Electricity	Combined science Physics FT and HT	Current 2.1.1
		Combined science Physics FT	Circuit diagrams 2.1.1
		Combined science Physics FT	Potential difference 2.1.3
		Combined science Physics FT and HT	Ohm's Law 2.2.2

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	Forces	Combined science Physics FT	Velocity, speed and vectors 5.1.1
		Combined science Physics HT	Force diagrams 5.2.3
		Combined science Physics FT	Contact and non-contact forces 5.1.3
		Combined science Physics FT and HT	Gravity 5.2.1
		Combined science Physics HT	Basics of Motion 3, 5.1.3
		Combined science Physics HT	Basics of motion 1, 5.1.1
		Combined science Physics FT and HT	Resultant forces 5.2.2
		Combined science Physics FT and HT	Stopping distance 5.3.2
	Organisation	Combined science Biology FT	Organisation 2.1.1-2.1.3, 2.3.1-2.3.7, 2.4.1-2.4.6
		Combined science Biology HT	Organisation 2.1.1-2.1.2, 2.3.1-2.3.7, 2.4.1 -2.4.6
	Homeostasis	Combined science Biology FT	Homeostasis and response 5.1.1, 5.2.1 and 5.2.3
		Biology FT	Homeostasis and response 5.1.1 and 5.4.1
		Combined science Biology HT	Homeostasis and response 5.2.1 - 5.2.3
		Biology HT	Homeostasis and response 5.1.1 - 5.1.2 and 5.4.1-5.4.3
	Rates	Combined science Chemistry FT and HT	Chemical reactions and collisions 6.1.1

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	Organic Chemistry	Chemistry FT and HT	Crude oil 7.1.1
		Chemistry FT and HT	Alkanes 7.1.2
		Chemistry HT	Fractional distillation 7.1.3
		Chemistry FT	Fractional distillation 7.1.4
		Chemistry FT	Properties of hydrocarbons 7.1.3
		Chemistry FT and HT	Alkenes 7.2.1
	Quantitative Chemistry	Chemistry FT	Measuring mass 3.1.2
		Chemistry FT and HT	Chemical reactions and equations 1.1.2
	Infection and Response	Biology FT	Infection and response 3.2.1
		Biology HT	Infection and response 3.3.1-3.3.3

Term	**topics**	**Seneca Course**	**Course code and title**
Spring 1	Magnetism	Physics HT and FT	Magnetic materials 7.1.1
		Physics HT and FT	Magnetic Fields 7.1.2
	Energy	Combined science Physics HT and FT	Energy stores 1.1.1
		Combined science Physics HT and FT	Storing of energy 1.1.2
		Combined science Physics HT and FT	Energy transfers 1.1.4
		Combined science Physics FT	Power and energy transfers 1.2.2
		Combined science Physics FT	Energy losses and efficiency 1.2.1

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		Physics FT	Efficiency 1.2.1
		Physics HT	Energy losses and efficiency 1.1.2 and 1.1.2
		Physics FT	Energy losses 1.2.2
		Physics HT	Energy losses 1.2.3
		Combined science Physics FT and HT	Fossil fuels and geothermal 1.3.1
		Combined science Physics FT and HT	Wind and tidal 1.3.2
		Combined science Physics FT and HT	Nuclear and solar 1.3.3
	Inheritance, Evolution and Variation	Biology FT	Inheritance, variation and evolution 6.3.1-6.3.6
		Biology HT	Inheritance, variation and evolution 6.3.1-6.3.5
	Chemical Change	Chemistry FT	Alkali metals 1.1.11
		Chemistry HT	Alkali metals 1.1.10
		Chemistry FT	Displacement reactions 4.2.2
		Chemistry HT	Reactivity tests and extraction 4.2.2
		Chemistry HT	Reactions with metals and acids 4.3.1
	Energy Changes	Chemistry FT and HT	Exothermic and endothermic reactions 5.1.1
		Chemistry FT and HT	Reaction profiles 5.1.2

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	Space	Physics FT and HT	The solar system 8.1.1
		Physics FT	Life cycle of a star 8.1.3
		Physics FT and HT	Orbits 8.1.2
		Physics HT	Orbits hyper learning 8.1.3

Term	topics	Seneca Course	Course code and title
Spring 2	Chemical Change	Chemistry FT	Alkali metals 1.1.11
		Chemistry HT	Alkali metals 1.1.10
		Chemistry FT	Displacement reactions 4.2.2
		Chemistry HT	Reactivity tests and extraction 4.2.2
		Chemistry HT	Reactions with metals and acids 4.3.1
	Organic Chemistry	Chemistry FT and HT	Crude oil 7.1.1
		Chemistry FT and HT	Alkanes 7.1.2
		Chemistry HT	Fractional distillation 7.1.3
		Chemistry FT	Fractional distillation 7.1.4
		Chemistry FT	Properties of hydrocarbons 7.1.3
		Chemistry FT and HT	Alkenes 7.2.1
	Quantitative Chemistry	Chemistry FT	Measuring mass 3.1.2
		Chemistry FT and HT	Chemical reactions and equations 1.1.2

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	Ecology	Combined Science Biology FT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.3
		Combined Science Biology HT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.5
		Biology FT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.6
		Biology HT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.8
	Homeostasis and hormones	Combined Science Biology FT	Homeostasis and response 5.1.1 and 5.2.1-5.2.3
		Combined Science Biology HT	Homeostasis and response 5.1.1-5.1.2 and 5.4.1-5.4.3
		Biology FT	Homeostasis and response 5.1.1 and 5.4.1
		Biology HT	Homeostasis and response 5.1.1-5.1.2 and 5.4.1-5.4.3
	Electricity	Physics HT and FT	Static electricity 2.5.1
		Physics HT and FT	Conductors
		Combined science Physics FT and HT	Current 2.1.1
		Combined science Physics FT	Circuit diagrams 2.1.1
		Combined science Physics FT	Potential difference 2.1.3
		Combined science Physics FT and HT	Ohm's Law 2.2.2
	Using resources	Chemistry FT and HT	Metal extraction and the

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			properties of copper 10.1.5
		Chemistry FT and HT	Overexploitation and alternative extraction methods 10.1.6
		Chemistry FT and HT	Potable water 10.1.1
		Chemistry FT and HT	Waste water and sewage treatment 10.1.4
	Energy	Combined science Physics HT and FT	Energy stores 1.1.1
		Combined science Physics HT and FT	Storing of energy 1.1.2
		Combined science Physics HT and FT	Energy transfers 1.1.4
		Combined science Physics FT	Power and energy transfers 1.2.2
		Combined science Physics FT	Energy losses and efficiency 1.2.1
		Physics FT	Efficiency 1.2.1
		Physics HT	Energy losses and efficiency 1.1.2 and 1.1.2
		Physics FT	Energy losses 1.2.2
		Physics HT	Energy losses 1.2.3
		Combined science Physics FT and HT	Fossil fuels and geothermal 1.3.1
		Combined science Physics FT and HT	Wind and tidal 1.3.2
		Combined science Physics FT and HT	Nuclear and solar 1.3.3

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Term	topics	Seneca Course	Course code and title
Summer 1	Waves	Combined Science Physics FT	Transverse and longitudinal 6.1.1
		Combined Science Physics HT	Transverse and longitudinal 6.1.2
		Physics FT	Transverse 6.1.1
		Physics FT	Longitudinal 6.1.2
		Combined Science Physics FT	Describing waves 6.1.2 and 6.1.3
		Combined Science Physics FT	Calculating wave speed 6.1.3
		Combined Science Physics FT	Sound waves 6.1.4
		Combined Science Physics HT	Basics and formula 6.1.1
		Physics HT and FT	Sound waves 6.3.1
		Physics HT	Sound waves 2,6.3.2
		Combined Science Physics HT	Ripple tank 6.1.4
		Combined Science Physics FT	Waves at a boundary 6.2.5
		Combined Science Physics HT	Waves at a boundary 6.2.5
		Combined Science Physics FT and HT	Waves at a boundary 2, 6.2.2
	Infection and response	Biology FT	Infection and Response 3.2.1
		Biology HT	Infection and response 3.3.1-3.3.3
	Chemical analysis	Chemistry FT	Purity and formulations 8.1.1
		Chemistry FT and HT	Paper chromatography 8.1.2

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		Chemistry FT and HT	RP paper chromatography 8.1.3
		Chemistry FT and HT	Testing for hydrogen 8.2.1
		Chemistry FT and HT	Testing for oxygen 8.2.2
		Chemistry FT and HT	Testing for carbon dioxide 8.2.4
		Chemistry FT and HT	Summary of gas tests 8.2.5
	Atmosphere	Combined science Chemistry FT	Proportions of gases in the atmosphere 9.1.1
		Chemistry FT	The early atmosphere 9.1.2
		Chemistry HT	Oxygen and Carbon dioxide in the atmosphere 9.1.2
	Ecology and decomposition	Combined Science Biology FT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.3
		Combined Science Biology HT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.5
		Biology FT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.6
		Biology HT	Ecology 7.1.1-7.1.2 and 7.2.1-7.2.8

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Term	topics	Seneca Course	Course code and title
Summer 2	Chemical Analysis	Chemistry FT	Purity and formulations 8.1.1
		Chemistry FT and HT	Paper chromatography 8.1.2
		Chemistry FT and HT	RP paper chromatography 8.1.3
		Chemistry FT and HT	Testing for hydrogen 8.2.1
		Chemistry FT and HT	Testing for oxygen 8.2.2
		Chemistry FT and HT	Testing for carbon dioxide 8.2.4
		Chemistry FT and HT	Summary of gas tests 8.2.5
	Using resources	Combined science Chemistry FT	Proportions of gases in the atmosphere 9.1.1
		Chemistry FT	The early atmosphere 9.1.2
		Chemistry HT	Oxygen and Carbon dioxide in the atmosphere 9.1.2
	Rates	Combined science Chemistry FT and HT	Chemical reactions and collisions 6.1.1
	Energy Changes	Chemistry FT and HT	Exothermic and endothermic reactions 5.1.1
		Chemistry FT and HT	Reaction profiles 5.1.2
	Waves	Combined Science Physics FT	Transverse and longitudinal 6.1.1

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		Combined Science Physics HT	Transverse and longitudinal 6.1.2
		Physics FT	Transverse 6.1.1
		Physics FT	Longitudinal 6.1.2
		Combined Science Physics FT	Describing waves 6.1.2 and 6.1.3
		Combined Science Physics FT	Calculating wave speed 6.1.3
		Combined Science Physics FT	Sound waves 6.1.4
		Combined Science Physics HT	Basics and formula 6.1.1
		Physics HT and FT	Sound waves 6.3.1
		Physics HT	Sound waves 2,6.3.2
		Combined Science Physics HT	Ripple tank 6.1.4
		Combined Science Physics FT	Waves at a boundary 6.2.5
		Combined Science Physics HT	Waves at a boundary 6.2.5
		Combined Science Physics FT and HT	Waves at a boundary 2, 6.2.2
	Atomic Structure Physics	Physics FT and HT	Atomic model 4.1.1
		Physics FT and HT	Atomic Model 2, 4.1.2
		Physics FT and HT	Atoms and Ions 4.1.3
		Physics FT and HT	Isotopes 4.1.4
		Physics FT and HT	Radioactive decay 4.2.1
		Physics FT and HT	Types of radioactive decay 4.2.2
		Physics FT and HT	Radioactive decay equations 4.2.3

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		Physics FT and HT	Half lives and ionising radiation 4.2.4
		Physics FT	Uses of radiation 4.2.5
		Physics FT	Dangers of radiation 4.2.6
		Physics HT	Uses and dangers of radiation 1&2, 4.2.5 and 4.2.6
	Bioenergetics	Combined science Biology HT and FT	Respiration 1 &2, 4.2.1 & 4.2.2