

Combined Science

Contact:

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The examinations

Trilogy Science (combined science)

Biology paper 2: 1hr 15 m (higher or foundation)

Chemistry paper 2: 1hr 15 m (higher or foundation)

Physics paper 2: 1hr 15 m (higher or foundation)

Topics to be covered in the examinations and Oak National Academy revision links

The exam board AQA have issued a list of content that will not be on the 2022 exams so this will be highlighted for each paper.

Biology paper 2

Units that will be on the paper

Homeostasis and response

Foundation <https://classroom.thenational.academy/units/homeostasis-and-response-ft-d80b>

Higher <https://classroom.thenational.academy/units/homeostasis-and-response-ht-885b>

Inheritance, variation, and evolution

Foundation <https://classroom.thenational.academy/units/inheritance-variation-and-evolution-ft-ceb0>

Higher <https://classroom.thenational.academy/units/inheritance-variation-and-evolution-ht-e8aa>

Ecology

Foundation <https://classroom.thenational.academy/units/ecology-ft-0a93>

Higher <https://classroom.thenational.academy/units/ecology-ht-bdf3>

Individual content from units that will not be on the paper

Foundation Tier	Higher Tier
<ul style="list-style-type: none">• 4.5.2 The human nervous system• 4.5.3.3 Hormones in human reproduction• 4.5.3.4 Contraception• 4.6.1.1 Sexual and asexual reproduction• 4.6.1.2 Meiosis• 4.6.1.6 Sex determination• 4.6.2.1 Variation• 4.6.2.2 Evolution• 4.6.2.3 Selective breeding• 4.6.3.3 Extinction• 4.6.3.4 Resistant bacteria• 4.7.1.4 Adaptations• 4.7.3.1 Biodiversity• 4.7.3.3 Land use• 4.7.3.4 Deforestation• 4.7.3.5 Global warming• 4.7.3.6 Maintaining biodiversity	<ul style="list-style-type: none">• 4.5.2 The human nervous system• 4.5.3.4 Contraception• 4.6.1.1 Sexual and asexual reproduction• 4.6.1.3 DNA and the genome• 4.6.1.4 Genetic inheritance• 4.6.1.5 Inherited disorders• 4.6.1.6 Sex determination• 4.6.2 Variation and evolution• 4.6.3 The development of understanding of genetics and evolution• 4.7.1.4 Adaptations• 4.7.3.3 Land use• 4.7.3.4 Deforestation

Chemistry paper 2

Units that will be on the paper

The rate and extent of chemical change

Foundation <https://classroom.thenational.academy/units/the-rate-and-extent-of-chemical-change-ft-46d0>

Higher <https://classroom.thenational.academy/units/the-rate-and-extent-of-chemical-change-ht-3fc0>

Organic chemistry

Foundation <https://classroom.thenational.academy/units/organic-chemistry-ft-bdc3>

Higher <https://classroom.thenational.academy/units/organic-chemistry-ht-7e6f>

Chemical analysis

Foundation <https://classroom.thenational.academy/units/chemical-analysis-ft-6abb>

Higher <https://classroom.thenational.academy/units/chemical-analysis-ht-0e18>

Chemistry of the atmosphere

Foundation <https://classroom.thenational.academy/units/chemistry-of-the-atmosphere-ft-c5d7>

Higher <https://classroom.thenational.academy/units/chemistry-of-the-atmosphere-ht-ec1f>

Using resources

Foundation <https://classroom.thenational.academy/units/using-resources-ft-be74>

Higher <https://classroom.thenational.academy/units/using-resources-ht-9d74>

Individual content from units that will not be on the paper

Foundation Tier <ul style="list-style-type: none">5.9.2 Carbon dioxide and methane as greenhouse gases	Higher Tier <ul style="list-style-type: none">5.8.2 Identification of common gases
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Physics paper 2

Units that will be on the paper

Forces

Foundation <https://classroom.thenational.academy/units/forces-ft-9dee>

Higher <https://classroom.thenational.academy/units/forces-ht-573f>

Waves

Foundation <https://classroom.thenational.academy/units/waves-ft-df6c>

Higher <https://classroom.thenational.academy/units/waves-ht-8526>

Magnetism and electromagnetism

Foundation <https://classroom.thenational.academy/units/magnetism-ft-6f8c>

Higher <https://classroom.thenational.academy/units/magnetism-ht-f466>

Individual content from units that will not be on the paper

Foundation Tier <ul style="list-style-type: none">6.5.3 Elastic forces	Higher Tier <ul style="list-style-type: none">6.5.3 Elastic forces6.5.4.3 braking forces6.7.1 Permanent and induced magnetism, magnetic forces, and fields
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Resources to help students revise and prepare

Oak National Academy

Seneca: <https://senecalearning.com/en-GB/>

BBC Bitesize <https://www.bbc.co.uk/bitesize/examspecs/z8r997h>

Triple Science

Contact:

Triple Science taz.chikwavira@avonbourneacademy.org.uk

The examinations

Triple Science (Separate sciences)

Biology paper 2: 1hr 45 m (higher)

Chemistry paper 2: 1hr 45 m (higher)

Physics paper 2: 1hr 45 m (higher)

Topics to be covered in the examinations and Oak National Academy revision links

The exam board AQA have issued a list of content that will not be on the 2022 exams so this will be highlighted for each paper.

Biology paper 2

Units that will be on the paper

Homeostasis and response <https://classroom.thenational.academy/units/homeostasis-and-response-1a15>

Inheritance, variation, and evolution <https://classroom.thenational.academy/units/inheritance-variation-and-evolution-0224>

Ecology <https://classroom.thenational.academy/units/ecology-a6da>

Individual content from units that will not be on the paper

- 4.5.2.1 Structure and function
- 4.5.2.2 The brain
- 4.5.2.3 The eye
- 4.5.3.4 Hormones in human reproduction
- 4.5.3.5 Contraception
- 4.5.3.6 The use of hormones to treat infertility
- 4.5.3.7 Negative feedback
- 4.5.4.2 Use of plant hormones
- 4.6.1.3 Advantages and disadvantages of sexual and asexual reproduction
- 4.6.1.8 Sex determination
- 4.6.2 Variation and evolution
- 4.6.3 The development of understanding of genetics and evolution
- 4.6.4 Classification of living organisms
- 4.7.1.4 Adaptations
- 4.7.2.4 Impact of environmental change
- 4.7.3.1 Biodiversity
- 4.7.3.4 Deforestation
- 4.7.3.6 Maintaining biodiversity
- 4.7.4.1 Trophic levels
- 4.7.4.2 Pyramids of biomass
- 4.7.5.3 Sustainable fisheries
- 4.7.5.4 Role of biotechnology

Chemistry paper 2

Units that will be on the paper

The rate and extent of chemical change <https://classroom.thenational.academy/units/the-rate-and-extent-of-chemical-change-0530>

Organic chemistry <https://classroom.thenational.academy/units/organic-chemistry-7c58>

Chemical analysis <https://classroom.thenational.academy/units/chemical-analysis-cf8d>

Chemistry of the atmosphere <https://classroom.thenational.academy/units/chemistry-of-the-atmosphere-522e>

Using resources <https://classroom.thenational.academy/units/using-resources-febe>

Individual content from units that will not be on the paper

- 4.9.2 Carbon dioxide and methane as greenhouse gases

Physics paper 2

Units that will be on the paper

Forces <https://classroom.thenational.academy/units/forces-6562>

Waves <https://classroom.thenational.academy/units/waves-4cef>

Magnetism and electromagnetism <https://classroom.thenational.academy/units/magnetism-bf8d>

Space physics <https://classroom.thenational.academy/units/space-physics-only-a558>

Questions in paper 2 may draw on an understanding of energy changes and transfers due to heating, mechanical and electrical work, and the concept of energy conservation from Energy and Electricity.

Individual content from units that will not be on the paper

- 4.5.4 Moments, levers and gears
- 4.6.2 Electromagnetic waves
- 4.6.3 Black body radiation
- 4.7.1 Permanent and induced magnetism, magnetic forces and fields

Resources to help students revise and prepare:

Seneca: <https://senecalearning.com/en-GB/>

Oak National Academy

BBC Bitesize:

- Biology <https://www.bbc.co.uk/bitesize/examspecs/zpgcbk7>
- Chemistry <https://www.bbc.co.uk/bitesize/examspecs/z8xtmnb>
- Physics <https://www.bbc.co.uk/bitesize/examspecs/zsc9rdm>