

Our Curriculum Intent: To provide an outstanding Science curriculum for all students so all students can achieve outstanding outcomes. Our curriculum prepares students for life in modern Britain. It engages and enthuses students to encourage futures in further education and employment opportunities. Our curriculum provides opportunities to support and develop high standards of literacy and numeracy to obtain this.

Year 7 Science

Subject title: Science

Setting arrangements: Mixed ability tutor groups until October half term. Transition assessment is used to broad stream students.

Time allowance each fortnight: 6 hours per fortnight

Assessment : End of unit assessments are delivered and marked by class teachers.

Three formal tests under exam conditions.

Timings of assessments

Early skills assessment – October (after Transition unit)

Mid Year assessment - March

End of year assessment test – July.

Topics covered during the course

Autumn term:

Transition unit

Organisms

Matter

Spring term:

Waves

Genes

Reaction

Summer Term:

Electricity

Ecosystems

Forces

Earth

Skills developed during the course

Students are continuously developing data presentation and analytical skills. Students also learn how to plan, carry out and evaluate practical work using a variety of apparatus and techniques. This will also provide the opportunity to work collaboratively with their peers.

AGS Enhance:

Expected time allocation for the subject

2x30 minutes each week

All students are expected to access Tassomai learning platform to complete daily goals. Students are also set fortnightly retrieval practise to be able to recall core concepts.

Websites

<http://www.bbc.co.uk/schools/ks3bitesize/science/>

<http://lgfl.skool.co.uk/keystage3.aspx?id=80>

<http://www.docbrown.info/ks3science.htm>

<https://www.tassomai.com/>

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

Year 8 Science

Subject title: Science

Setting arrangements: End of Year 8 assessment is used to refine the broad stream of students.

Time allowance each fortnight: 6 hours per fortnight

Assessment : End of unit assessments are delivered and marked by class teachers.

Three formal tests under exam conditions.

Timings of assessments

Autumn term assessment - December

Mid Year assessment - March

End of year assessment test – July.

Topics covered during the course

Autumn term:

Organisms

Matter

Energy

Spring term:

Waves

Genes

Reactions

Electricity

Summer Term:

Ecosystems

Forces

Earth

Skills developed during the course

Students are continuously developing data presentation and analytical skills. Students also learn how to plan, carry out and evaluate practical work using a variety of apparatus and techniques. This will also provide the opportunity to work collaboratively with their peers.

AGS Enhance:

Expected time allocation for the subject

2x30 minutes each week

All students are expected to access Tassomai learning platform to complete daily goals. Students are also set fortnightly retrieval practise to be able to recall core concepts.

Websites

<http://www.bbc.co.uk/schools/ks3bitesize/science/>

<http://lgfl.skool.co.uk/keystage3.aspx?id=80>

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Year 9 Science

Subject title: Science

Setting arrangements: End of Transition Unit is used to refine the broad stream of students.

Time allowance each fortnight: 7-9 hours per fortnight

Assessment : End of unit assessments are delivered and marked by class teachers.

Three formal tests under exam conditions. All assessments are based around GCSE style exam questions to prepare students for Y10 and Y11.

Timings of assessments

Transition assessment - October

Mid Year assessment - March

End of year assessment test – July.

Topics covered during the course

Autumn term:

Transition unit

Biology - Cell Biology

Chemistry - Atomic structure and the Periodic table

Spring term:

Physics - Energy

Biology - Organisation of organisms

Summer Term:

Chemistry - Reactions

Physics – Matter

Skills developed during the course

Within these topics, students will develop their scientific skills particularly the development of scientific thinking, experimental skills, analysis and evaluation of data and the use of scientific vocabulary, quantities, units, symbols and nomenclature. Mathematical skills will also be developed such as arithmetic and numerical computation, handling data, algebra, graphs, geometry and trigonometry. The continuation practise of and amalgamation of these compliment of skills is key to the preparation of students for further KS4 study.

AGS Enhance:

Expected time allocation for the subject

2x30 minutes each week

All students are expected to access Tassomai learning platform to complete daily goals. Students are also set fortnightly retrieval practise to be able to recall core concepts.

Websites

<http://www.bbc.co.uk/schools/ks3bitesize/science/>

<http://lgfl.skool.co.uk/keystage3.aspx?id=80>

<http://www.docbrown.info/ks3science.htm>

<https://www.tassomai.com/>

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

Year 10 Science

Subject title: Science

Setting arrangements: Broad stream of students.

Time allowance each fortnight: 9 hours per fortnight

Assessment : End of unit assessments are delivered and marked by class teachers.

Three formal tests under exam conditions. All assessments are based around GCSE style exam questions to prepare students for Y11.

Timings of assessments

Entry examination in Biology, Chemistry and Physics – July.

Topics covered during the course

Autumn term:

Physics – Atomic structure

Biology – Infection and response

Chemistry – Reactions: energy changes and rates of reaction.

Spring term:

Biology – Bioenergetics

Chemistry - Chemistry of the Atmosphere

Biology - Ecology

Summer Term:

Physics – Forces

Chemistry – Using resources

Skills developed during the course

Within these topics, students will develop their scientific skills particularly the development of scientific thinking, experimental skills, analysis and evaluation of data and the use of scientific vocabulary, quantities, units, symbols and nomenclature. Mathematical skills will also be developed such as arithmetic and numerical computation, handling data, algebra, graphs, geometry and trigonometry. The continuation practise of and amalgamation of these compliment of skills is key to the preparation of students for further KS4 study.

AGS Enhance:

Expected time allocation for the subject

2x30 minutes each week

All students are expected to access Tassomai learning platform to complete daily goals. Students are also set fortnightly retrieval practise to be able to recall core concepts.

Websites

<http://www.bbc.co.uk/schools/ks3bitesize/science/>

<http://lgfl.skool.co.uk/keystage3.aspx?id=80>

<http://www.docbrown.info/ks3science.htm>

<https://www.tassomai.com/>

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

<https://www.physicsandmathstutor.com/>

Revision Guides we recommend to support with AGS Enhance and AGS Success are:

New GCSE Knowledge Retriever: AQA Combined Science - Higher (Grade 9-1): perfect for catch-up and the 2022 and 2023 exams (CGP GCSE Combined Science 9-1 Revision) Paperback.

New GCSE Knowledge Organiser: AQA Combined Science - Higher (Grade 9-1): ideal for catch-up and the 2022 and 2023 exams (CGP GCSE Combined Science 9-1 Revision)

Oxford Revise: AQA GCSE Combined Science Higher Revision and Exam Practice

Year 11 Science

Subject title: Science

Setting arrangements: broad stream of students. Students are also streamed depending on the course sitting.

Time allowance each fortnight: 9 hours per fortnight

Assessment : End of unit assessments are delivered and marked by class teachers.

Two formal tests under exam conditions. All assessments are based around GCSE style exam questions to prepare students for Y11 examination.

Timings of assessments

Entry examination – November

Entry examination – March

GCSE exam series – May – June.

Topics covered during the course

Autumn term:

Biology – Homeostasis

Chemistry – Quantitative Chemistry and chemical changes.

Physics – Electricity

Spring term:

Biology – Inheritance and evolution.

Chemistry – Organic Chemistry.

Physics – Magnetism and Electromagnetism

Summer Term:

Chemistry – Chemical analysis

Physics – Waves.

Physics- Space (Triple only)

Skills developed during the course

Within these topics, students will develop their scientific skills particularly the development of scientific thinking, experimental skills, analysis and evaluation of data and the use of scientific vocabulary, quantities, units, symbols and nomenclature. Mathematical skills will also be developed such as arithmetic and numerical computation, handling data, algebra, graphs, geometry and trigonometry. The continuation practise of and amalgamation of these compliment of skills is key to the preparation of students for further KS4 study.

AGS Enhance:

Expected time allocation for the subject

2x30 minutes each week

All students are expected to access Tassomai learning platform to complete daily goals. Students are also set fortnightly retrieval practise to be able to recall core concepts.

Websites

<http://www.bbc.co.uk/schools/ks3bitesize/science/>

<http://lgfl.skool.co.uk/keystage3.aspx?id=80>

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