

**Thematic Overview / Year 10 / Autumn 2**

**2016-2017**

Dear Parent / Guardian

Please find attached our Thematic Overview for Year 10 Autumn 2.

We hope that this will give you a clear picture of the work being carried out by your child in school and enable you to facilitate their learning at home.

The activities being carried out encourage your child to review past learning, access and retain new knowledge, as well as develop and practise a variety of key skills to prepare them for ambitious goals.

Yours sincerely

Ms L. Gonzalès

Head of Secondary

**English** --------------------------------------------------------------------------------------------------------------------------

**First Language**

This half term, the students will be continuing to prepare for the IGCSE First Language paper with a focus on question one. The students will also complete their second assignment for coursework.

*Key objectives covered:*

* Demonstrate understanding of explicit meanings.
* Demonstrate understanding of implicit meanings and attitudes.
* Analyse, evaluate and develop facts, ideas and opinions.
* Demonstrate understanding of how writers achieve effects.
* Articulate experience and express what is thought, felt and imagined.
* Sequence facts, ideas and opinions.
* Use a range of appropriate vocabulary.
* Use register appropriate to audience and context.
* Make accurate use of spelling, punctuation and grammar.

**Second Language**

This half term, the students will be continuing to prepare for their IGCSE listening, reading and writing exams. They will be working on building their vocabulary, and their spoken and written English skills.

**English Literature** -------------------------------------------------------------------------------------------------------

This half term, the students will begin independent reading of the set text ‘Spies’ by Michael Frayn in preparation for their literature exam. Full studies of their exam will begin during the Summer Term.

**Mathematics** ----------------------------------------------------------------------------------------------------------------

This half term, the students will need to continue to revise past objectives, and will find all content from this year potentially on their end of term assessment. They will cover the following topics:

* Solve simultaneous equations.
* Add, subtract, multiply and divide fractions.
* Find a fraction of a quantity.
* Change fractions and decimals into a percentage.
* Calculate the percentage of a quantity.
* Increase and decrease quantities by a percentage.
* Calculate simple interest.
* Calculate compound interest.

**Science / Biology, Chemistry, Physics** ---------------------------------------------------------------------

This half term, the learning objectives for each unit to be taught in Biology/Chemistry/Physics will give an overview of Year 10 expectations that will help parents facilitate and support Home Learning and revision of the topics. It is vital that the students do their homework.

# Chemistry

*Experimental techniques:*

* Name apparatus for the measurement of time, temperature, mass and volume.
* Use paper chromatography and interpret simple chromatograms.
* Describe and explain methods of purification.

*Atoms, elements and compounds:*

* Relative charges and masses of protons, neutrons and electrons.
* Proton number (atomic number) and mass number.
* Isotopes.
* Electronic structure.
* Differences between elements, mixtures and compounds, and between metals and non-metals.
* Formation of ionic bonds and formation of single covalent bonds and metallic bonding.

# Biology

*Movement in and out of cells:*

* Define diffusion and osmosis.
* Investigate the factors that influence diffusion, limited to surface area, temperature, concentration gradients and distance.
* Use the terms turgid, turgor pressure, plasmolysis and flaccid.
* Define active transport.

# Physics

*Energy, work and power:*

* Kinetic, gravitational potential, chemical, elastic (strain), nuclear and internal.
* Conservation of energy.
* Use W = Fd = ΔE, P = ΔE / t.
* Efficiency = Useful energy output/energy input × 100%.

*Energy resources:*

- Renewable and nonrenewable energy sources

- The sun is the source of energy for all our energy resources except geothermal, nuclear and tidal.

*Pressure:*

* Use the equation p = F / A
* Simple mercury barometer and its use in measuring atmospheric pressure.
* Use the equation p = hρg.

**Global Perspectives** ----------------------------------------------------------------------------------------------------

This half term, the students will focus on migration and the spread of population. The students will learn about:

* Types of migration.
* International migration patterns.
* Factors affecting migration.
* Rural to urban migration.
* Counter urbanisation methods.
* Refugees and asylum seekers differences and developments.
* Governments’ role in assisting migrations.

This will be more of a research-based topic so the students can get used to researching information for their first piece of IGCSE coursework for Global Perspectives, which will be completed this academic year.

**French** ---------------------------------------------------------------------------------------------------------------------------

This half term, the students will:

* Talk about themselves and ask questions to someone else.
* Memorise new vocabulary relating to activities, excuses and opinions.
* Write a short paragraph using accurate grammar and spelling.
* Listen to a short conversation and answer simple questions.
* Read a short text and answer various questions.

**Performing Arts** -----------------------------------------------------------------------------------------------------------

In this unit, the students will learn to:

* Understand what is meant by a Fanfare.
* Learn about the origins and uses of Fanfares.
* Learn about the Harmonic Series.

**Creative Design** -----------------------------------------------------------------------------------------------------------

Through exploring a selected topic of the student’s choice, they will continue to learn to:

* Observe and record accurately.
* Analyse their own artworks critically.
* Create works inspired by various artists of their own choice.
* Experiment with various media, such as printmaking, acrylic paint, pencil sketches.
* Take high quality photographs for their selected topic to use as their primary sources.

**Physical Education** -----------------------------------------------------------------------------------------------------

This half term, the students will develop movement composition, an understanding of health and fitness, and the skills required for a variety of different games. They will:

* Perform a wider range of movements requiring agility, balance and co-ordination with control, precision and fluency.
* Master techniques whilst running, jumping, throwing, catching, and striking skills.
* Improve accuracy, consistency and technique in a variety of skills.
* Develop and apply a broader understanding of how the body responds to exercise.
* Apply a variety of sport specific skills with consistency to different games in various positions.
* Continue to develop specific and accurate shooting techniques required in different games.
* Pass the ball accurately and consistently between teammates in a variety of games.
* Successfully apply a range of tactics and strategies successfully to outwit the opposition in games.