



Ministerium Tuum Imple Love | Serve | Do the best that is possible

Year 9 Curriculum Information Booklet

Lent Term 2020



Faculty of RE, Geography and History

Religious Education:

Pupils will study the concepts of Modern Responses to Religion focusing on the question 'Is it possible to be a Christian and believe in science?' which will include the following aspects:

- Creation stories from the bible
- Big Bang and Evolution
- Charles Darwin
- Abortion
- Euthanasia

Pupils will then begin their GCSE Edexcel Religious Studies course. They will first study Judaism: Beliefs and Teachings from Paper 2. This will include the following aspects:

- The Almighty
- The Shekinah
- The Covenant with Abraham
- The Covenant at Sinai with Moses
- The Sanctity of Life and Pikuach Nefesh

Geography:

Tectonic hazards

Students start the unit on "Challenge of Natural Hazards" by focussing initially on tectonic hazards (earthquakes and volcanoes).

Weather hazards

They continue learning about natural hazards through the study of weather hazards (tropical storms and extreme weather in the UK).

History:

In the Lent term students will continue to study their depth study of America in the Twentieth Century. They will evaluate life in post war American society and the impact on the economy. They will investigate racial tension and development in the 1950s and 1960s, examining the extent of success for the Civil Rights campaign.

Faculty of Languages

English:

As Year 9 students move into Lent term, there will be a specific focus on 'Poetry' as a part of English Literature study. As an introduction, they will be exploring a selection of poems with a similar theme. They will also consolidate key skills required in the analysis of unseen poems and poetry comparison.

Languages:

This is an important term, as we begin the GCSE syllabus. Between now and the end of Year 11, students will be learning and practising the language they will need to perform well in their exams. This will include the ability to ask and answer questions (an important new element of the new-style GCSE) and to respond spontaneously.

At home, parents can help students to embed their learning by testing vocabulary, whether formally, or at other times such as when in the car. The more often students practice, even if in short bursts, the more confident they will become!

In French, German and Spanish, we will be talking about our social lives and what we like to do in our free time, be it going out or watching TV or films. After half term, we will be learning about the different festivals and traditions in France, Germany and Spain, from Christmas and Easter to Valentine's Day and Carnival.

In Italian, we will be talking about presents we have received and will learn what to say when there are problems with items that have been bought. This will enable us to study some grammatical structures that will make our writing and speaking very impressive: direct & indirect object pronouns. After half term, pupils will learn how to talk about their future plans using a range of time markers that will make their writing more interesting.

Faculty of Mathematics and Science

Biology

Exam Board: OCR

Specification: Gateway Suite of Sciences A

Qualifications: GCSE Biology, GCSE Combined Science

Head of Biology: Samantha Jones, email address Samantha.Jones@st-pauls.org.uk

How can I find out more? www.ocr.org.uk We follow the Gateway Suite of Sciences.

Topic	Topic	Incorporating Lessons on...
B1 Cell Level Systems	B1.1 Cell structures	<ul style="list-style-type: none"> • Animal and Plant Cells • Cell Structure • Microscopes
	B1.2 What happens in cells and what do cells need?	<ul style="list-style-type: none"> • DNA as a molecule • Protein Synthesis • Enzymes •
	B1.3 Respiration	<ul style="list-style-type: none"> • Respiration and Exothermic reactions • Carbohydrates, Proteins and Fats •
	B1.4 Photosynthesis	<ul style="list-style-type: none"> • Photosynthesis • Photosynthesis limiting factors
B2 Scaling Up	B2.1 Supplying the cell	<ul style="list-style-type: none"> • Transport through cells • Mitosis and Meiosis • The cell cycle • Specialised vs Stem cells
	B2.2 The challenges of size	<ul style="list-style-type: none"> • Size of cells and SA:Vol ratio • Blood vessels • The Heart • The Heart and Double Circulation • Components of blood • Plant specialised cells • Transpiration and translocation

Chemistry

Exam Board: OCR

Specification: Gateway Suite of Sciences A

Qualifications: GCSE Chemistry, GCSE Combined Science

Head of Chemistry: Francesca Ferguson, email address Francesca.Ferguson@st-pauls.org.uk

How can I find out more? www.ocr.org.uk We follow the Gateway Suite of Sciences.

Topic	Specification Link
C1.2.1 Developing a Theory	C1.2a
C1.2.2 The Structure of the Modern Atom	C1.2b-6
C1.2.3 Isotopes	C1.2e
C2.2.2 The Periodic Table	C2.2i
C2.2.1 Electronic Structure	C2.2c, h
C2.2.3 Metals and Non-Metals	C2.2b
C4.1.1 Group 1 Alkali Metals	C4.1a,b
C4.1.2 Group 7 Halogens	C4.1a,b
C4.1.3 Group 0 Noble Gases	C4.1 a,b

Physics

Course title: OCR Gateway Physics A

Head of physics: Naadu Lawson, email address Naadu.Lawson@st-pauls.org.uk

	Module Contents	Assessment Points in Lessons
Unit 2	Electricity and Magnetism Lent Term 1. Static and charge You will learn about how electron transfer leads to objects becoming statically charged and the forces between them. 2. Simple circuits You be introduced to the measurement of conventional current and potential difference in circuits. You will develop a fundamental understanding of how to assemble series and parallel circuits and of how they differ with respect to conventional current and potential difference.	<p>Your approach to learning will be assessed each half term with a book check.</p> <p>You will sit a written paper each half term to assess your understanding of the content covered in lessons. This assessment will be synoptic, covering content from the entire course so far.</p> <p>Your practical skills will be assessed in Practical Assessment Group tasks, completed in lessons. You may be asked about these practical activities on exam papers. These may happen more often than once per half term.</p>

Mathematics:

In the Lent term, pupils will study mathematics in the context of science where they can encounter:

- BMI
- DNA
- Astronomy

Year 9 will also be studying the application of mathematics in the context of Citizenship. This will include topics from the following range:

- Statistical analysis tools
- Financial management
- Health management tools

Pupils will have in-class assessments on what they have covered in class and feedback will be given in their mathematics exercise books.

Some websites which may be of interest in helping them to further develop their understanding:

- www.mymaths.co.uk
- www.connect.collins.co.uk
- www.mathsbot.com
- www.bbc.co.uk/bitesize
- www.corbettmaths.com

Faculty of Communication and Design

Design and Technology

All pupils at St Paul's Catholic School follow a Design and Technology programme of study at Key Stage 3.

In year 9 pupils are studying further one of the material specific areas they have had previous experience of during year 7 and 8. This allows pupils to enhance their Technical Skills and understanding of in depth Technical Principles further in their chosen area. Pupils continue in their area of study from year 9-11 and, depending on the choices they have already made, go on to study GCSE Design and Technology, GCSE Food Preparation and Nutrition or OCR National(s) in Engineering Design and Manufacture.

Design and Technology courses are based around the Iterative Design Process.



The material specific areas offered are:

1. Electronic design (*leading to GCSE D&T*)
2. Graphics, cards papers and boards (*leading to GCSE D&T*)
3. Fashion and textiles (*leading to GCSE D&T*)
4. Woods, plastics and metals (*leading to GCSE D&T*)
5. Engineering design (*leading to OCR National(s) in engineering*)
6. Engineering manufacture (*leading to OCR National(s) in engineering*)
7. Food preparation and nutrition (*leading to GCSE FP&N*)

Computer Science

By the end of the year 9 students will have a basic understanding of designing solutions to programming problems. They will also know the fundamentals of programming at a basic level which will allow them to go onto more intermediate techniques in programming.

The following term students will develop an understanding of how the computer stores different types of data and be able to explain potential problems and benefits of each method explored.

The final term will explore the fundamentals of networked computers and be able to explain the benefits and problems of different set ups.

Detailed breakdown of topics covered

Advent Term

- Basic Algorithms
- Basic Programming techniques
- Basic Computational logic
- Basic/intermediate programming tasks
- Basic program design

Lent Term

- Binary numbers
- Hexadecimal numbers
- Characters
- Storing images
- Storing sound
- Compression
- Logic gates and truth tables
- Review of basic programming

Pentecost Term

- Networks – LAN and WAN
- Network topology
- Client server – peer to peer
- Network hardware
- Network protocol
- Internet
- Network security
- Review of programming

How You Can Support Your Child:

Homework will be specific to the learning of the topics listed above. Please talk to your child about their homework and the learning that has been undertaken during lessons.

Please encourage your child to take an interest in the Computer Science around them.

Watch Computer Science related TV programmes such as Mr Robot or other computer science related YouTube videos (will be given out in class to make sure they are up to date).

Also use (make further notes) from websites such as: BBC Bitesize and Teach-ICT.com

<http://www.bbc.co.uk/education/subjects/z34k7ty>

http://www.teach-ict.com/gcse_computing/ocr/GCSE_A451_topics.html

There is also a programming club run each week outside of the lesson time. Please encourage them to attend.

Faculty of Expressive Arts

Art:

Following their trip to Kew Gardens, Year 9 pupils are creating work inspired by several artists that have explored natural forms. The aim of the work covered in class is to focus on developing their technical skills and to effectively experiment with a variety of media, including photography, printmaking and drawing. Students will create their exciting and imaginative developments through the use of their first hand resources and independent research of the artists.

Drama:

Initially, Year 9 students will be exploring the play *An Inspector Calls*. This is a GCSE set text and ultimately they will be answering questions about how they would direct, perform and design certain scenes. At this stage they will be focusing on practical interpretation and gaining a well-developed understanding of character, theme and plot. Students will use a range of approaches to the text and experiment with stylistic and realistic portrayals.

Secondly, students will be focusing on refining their characterisation skills. They will be using music as a stimulus to explore different roles and then adopt and develop their use of body language and voice in order to depict their character. They will consider the background of their character and create histories and past experiences for them. They will explore their attributes and emotions by using spontaneous and rehearsed improvisation. Much of the work will be based around the techniques of Stanislavski and after exploring their role in great detail they will write and perform a monologue.

Music:

During the Lent term, students in year 9 will continue to study Pop music from the 1960s – present. They will do this through performance and listening activities. Students will study and perform music ranging from The Beatles and Bee Gees to songs from popular musical theatre productions, and Dance / Electronic music. Students will utilise music technology to sequence and produce their own performances too – they will develop their understanding of Logic, FL Studio and Sibelius.

Physical Education:

During the Lent term the pupils will follow a programme of study which will include team games, net games, dance, gymnastics and health related exercise. Throughout Key Stage 3 the pupils will work in mixed and single gender groups to develop their communication, thinking, analysis and evaluation skills. During Year 9, students focus on maximising performance by developing tactics introduced in Year 8, by refining skills learned in Year 7, and by developing their own personal fitness. Within physical education, the pupils are encouraged to take responsibility for their own personal organisation, perseverance and development of care and concern for others.

This term there will be lots of different opportunities for the students to extend their skills outside normal school hours through the extra-curricular programme which includes badminton, rugby, netball, football, basketball, dance, trampolining and health related fitness

training, handball and table tennis. Inter-form fixtures also take place through the Burditt Cup Inter-form Competition which includes football, rugby, netball, softball, rounders, cross country and sports day.

All pupils should be encouraged to attend at least one club session in at least one sport. For those pupils who have chosen PE in year 9 they will have an extra triple lesson per week. If they are studying GCSE PE they will focus on both the theory and practical content, which is assessed 70% theory and coursework and 30% practical sport. The theory aspect of the course will cover anatomy and physiology, biomechanics, the respiratory and cardiovascular systems as well as training and fitness and contemporary issues. The other option is the vocational course, OCR Sports Studies which consists of coursework units, a sports leadership unit (practical) and a practical unit in a sport of their choice and external examination worth 25%.