



At Dunottar we want to add value to every pupil so that, no matter what a child's individual abilities are, they are challenged and supported to develop a love of learning and to be prepared for the opportunities, responsibilities and experiences of adult life. Our Warrior Learner concept encourages our pupils to embrace the behaviours of aspiration, tenacity, curiosity, creativity, collaboration, inclusivity and independence. Lessons are designed to allow pupils to display these behaviours and reporting at KS3 refers directly to these.

Lessons are well-paced, challenging and fun. Within the curriculum each pupil is encouraged to achieve his/her full potential. The curriculum aims to educate the whole person through creative thinking and creative learning and the curriculum at Dunottar School extends far beyond the classroom and is enriched by a wide range of co-curricular activities.

On the following pages you will find an overview of the topics covered in each subject during Year 8.

English

In Year 8, pupils build on the knowledge and skills that they acquired in Year 7. We broaden their studies by introducing a broader range of texts.

In Year 8, pupils study the following:

- Modern drama
- A Shakespeare play
- Modern prose
- Gothic and supernatural poetry through time
- Modern nonfiction
- Oracy: a public speaking competition

As reading underpins the whole curriculum, we continue to encourage wider reading at home; reading homework to enhance student knowledge of the curriculum is regularly set.



Mathematics

In Year 8, pupils develop their knowledge and skills in many of the areas studied in Year 7; learning formal written methods and efficient calculator methods. In addition, they also study:

- Indices
- Linear equations & graphs
- Ratio and proportional reasoning
- Composite shapes
- Circles
- Volume and 3D visualisation

All pupils in the year group have their maths lessons at the same time and are taught in ability sets. All sets follow the same flow of topics meaning that pupils can easily move from one set to another to maximise their learning. Pupils use Hegarty Maths both in class and for homework, they can access both video lessons and quizzes on www.hegartymaths.com. In the summer term, a large number of pupils have the opportunity to compete in the Junior Maths Challenge, a national competition. Each year, 4 pupils are nominated to take part in ten Royal Institution Maths Masterclasses on Saturday mornings at the University of Surrey. Each student has access to Sparx, an online homework and independent learning platform. All homework will be set using this intuitive program with follow up support, or stretch and challenge tasks created from their homework responses.

Science

In Year 8 we continue with our own key stage 3 curriculum and build on skills learnt in Year 7.

Pupils are taught in mixed ability classes—6 lessons per week and continue to be taught Biology, Chemistry and Physics in blocks. Activities designed to promote thinking skills in science are continued in appropriate contexts throughout the year.

In Year 8 the topics covered include:

Biology

- Digestion and nutrition
- Biological systems and processes
- Plants and photosynthesis

Chemistry

- The periodic table
- Reactivity
- Energetics and rates

Physics

- Electricity and magnetism
- Sound waves
- Forces in action
- Matter

Geography

Geography continues to focus on enquiry and asking questions about the world around us. 'Ecosystems' begins the Autumn term with a look at global biomes down to local ecosystems. A fieldwork enquiry is conducted in the school grounds to investigate the temperate deciduous woodland on our doorstep and how the density of the canopy can affect the soil moisture, pH and light intensity. Global ecosystems focus on the Tropical Rainforests culminating in a study of the Amazon rainforest and the threats and opportunities presented by its exploitation. Cause and effect are investigated and pupils are encouraged to think about possible outcomes and consequences for different decisions which will be referred to and applied to various contexts through the course.

'Population' is studied through investigating population growth, distribution and migration. Pupils will be challenged to explain why Donald Trump wanted to build a wall between the USA and Mexico and will investigate the data of migration routes through both legal and illegal routes.

A local and national issue is investigated through our 'Should we allow fracking in Horley?' unit of work where pupils investigate the positive and negative impacts on a variety of scales of resource exploitation and question whether, with increasing global temperatures rising, we should be pursuing a fossil fuel future at all. Investigative map work and debate of the issue are key components of this unit.

We conclude the course by investigating whether Tourism has had a negative impact at Box Hill and visit the National Trust site to conduct transect surveys, vehicle tally and assess service provision as well as drawing field sketches from the observation point. An optional trip to the Isle of Wight to study rivers and coasts is offered on rotation with other department's residential trips.

History

The History curriculum is based on a series of enquiry questions. In Year 8, we cover aspects of history from 1500-1900 and these questions are:

Pupils will be taught the following enquiry units:

Enquiry 1: Elizabeth I and Mary, Queen of Scots – how did two powerful women become rival Queens for the English throne?

Enquiry 2: How did Miranda Kaufmann uncover the hidden lives of Black Tudors?

Enquiry 3: Was England turned 'upside down' in the C17th?

Enquiry 4: Was the Industrial Revolution a 'Liberty's Dawn'?

Enquiry 5: How did people campaign for greater political equality in the C19th and early C20th?

Enquiry 6: Did the history of Africa begin with the slave trade?

These topics are explored through the use of source evidence encouraging the pupils to consider 'How do we know these things?' and also considering whether changes were necessarily to the benefit of all those involved.

Religious Studies

In Year 8 we explore ethical and religious questions, looking at the following topics:

What does it mean to be a hero? An in-depth look at individuals who might be considered heroic. The unit examines how religious and non-religious belief systems have helped inform people's views and change their actions.

What does it mean to be a Muslim in today's world? This unit will help pupils understand the belief systems of Islam. What are the main cornerstones of the faith? What do they believe and how do they practise their faith? We will also examine some of the more difficult areas such as terrorism and the Islamic response to it.

Ultimate Questions This is a philosophical and ethical unit based around the most important and poignant questions in life such as: Can we prove God? What is the meaning of life? Is there a correct way to live our lives? How do we make moral decisions?

Pupils enter a competition called 'Spirited Art' where they work independently to choose a spiritual theme and create an artistic and written piece explaining what they have done.

Previous topics have included:

'Why does evil happen?' 'How do you know you're not dreaming?' and 'where is God in the modern world?'

Foreign Languages

Spanish:

In Spanish, pupils review and extend the basics acquired the previous year and extend their vocabulary and increase their grammatical knowledge and application through topics such as technology, holidays, school, and sport. They will also learn more about Hispanic culture, looking at differences between Spanish speaking countries and complete cultural projects.

French:

In French, pupils review and extend the basics acquired the previous year and extend their vocabulary and increase their grammatical knowledge and application through topics including personality, likes/dislikes, music, technology, hobbies, and food. They will start to use all three tenses and be introduced to reflexive verbs, intensifiers, and time phrases. Lessons focusing on Francophone culture also allow students to broaden their cultural knowledge of French speaking countries around the globe.

Art & Design

Observational drawings using varied media will be the basis of the first unit of work, allowing pupils to experiment with shape, form, texture, pattern, colour and scale. Further skills will be developed in the creation of 3D work and printmaking through the themes of natural forms. Pupils are also introduced to 'abstraction'. Pupils continue to develop their understanding of art history and critical thinking; this is then used to inspire pupils in their own work. Sketchbooks continue to be used to plan, evaluate and develop ideas alongside studio-based work.

Design & Technology

Design & Technology is on a rotation with Food & Nutrition. In Year 8, the first project is a "Day of the Dead" themed E-Textiles module where pupils design and make a fabric decoration using sewable electronic components and conductive thread. The second project focusses on user-centred design, where pupils will analyse existing products and carry out a variety of designing and making tasks.

Food & Nutrition

In Year 8, students will study a unit called "Healthy Kid's Cook". The course focuses on developing enjoyment and the love of good food. The students cook a range of well balanced and tasty dishes that encourage good nutrition as well as developing a wide range of practical skills. Dishes include breakfast burrito, fried rice, Mexican tortilla lasagne. Students will also learn about the macronutrients and the functions of each nutrient in the body. We also look at planning and understanding how to eat a balanced diet. As well as looking at scientific properties of ingredients, for example, the process of gelatinisation in making a roux-based sauce. students will also complete an independent cooking task based on a 5-a-day challenge.

Computing

In Year 8 we challenge pupils to think about the question 'what happens when you type in a web address and press enter...how does the website appear on your screen?' We discover how the internet works and then go on to explore how websites are programmed using HTML. Pupils enjoy the creativity of creating web graphics and celebrate the achievement of coding their own pages. Sphero BOLT is an app-enabled robotic ball and a valuable teaching tool. Programming with the Spheros provides a wealth of opportunities for pupils to learn many fundamental programming concepts in an interactive and engaging way. Pupils also learn about broader issues with computing in the modern world such as how encryption works and how technology affects our privacy. They also continue to learn about key programming constructs through creating a "chatbot" in Python.

Drama

In Year 8 students start by studying the non-naturalistic practitioners, Brecht and Berkoff. This scheme has a focus on social and political theatre and how it can shape the world. Following this, the students will study *The Woman in Black* by Susan Hill and explore how lighting, set and sound can be used to create atmosphere, location and the supernatural. Finally, Year 8 will revisit the system introduced by Stanislavski whilst studying extracts from *Blood Brothers* by Willy Russell. This will guide them to create believable performances and emotional characters.

Music

In Year 8, keyboard skills and understanding of harmony is developed through pieces of increasing difficulty. Pupils learn about:

Ladders: the study of tonality through learning about the building blocks of scales; major, minor, pentatonic and chromatic.

Pupils learn to play 'Für Elise' by Beethoven on the keyboard with several versions of difficulty to provide challenge at different skill levels.

Pop Music of the 60s: primary and secondary chords and an understanding of how to group chords into progressions to play a song. Pupils learn the chord patterns of songs by the Beatles and combine them with bassline.

Loops & Sequencing: music technology and the role it plays in the music industry today; pupils learn to sequence tracks onto music software, create loops, riffs and manipulate these using electronic effects. A key part of this unit involves learning about parts of the drum kit and pupils learn to perform and record different drum grooves in time to a song.

Variation Form: Understand how the elements of music can be used to make musical variations. Compose a theme and variations using devices such as inversion and retrograde.



Physical Education

Physical Education During Key Stage 3 the pupils follow a programme which includes rugby, football and cricket for the boys and netball, football and cricket for the girls. Athletics and swimming are also available weekly for both boys and girls. Within weekly 'PE' lessons students will complete 6-week blocks of Physical Activity. We cover a broad range of activities throughout our 'PE' curriculum and within each activity we bed in GCSE PE terminology, so we are building a strong foundation and understanding of sport (tactical and technical) and physical activity from Year 7 through to Year 9 when students chose their GCSE options.

All of our 'PE' lessons are geared up to help students identify how to live a healthy and active lifestyle through the participation of sport and physical activity. Throughout the PE and Games lessons, students will experience different roles, such as coaching and officiating too, to develop their communication and leaderships skills. Co-curricular clubs run during both lunchtimes and after school for both competitive and recreational activities with fixtures taking place during the week and on Saturday mornings.

PSHE/RSE

PSHE is taught as a timetabled lesson by allocated members of staff with a number of the themes being followed up in Assemblies, with outside speakers and in form times. The pupils follow a progressive course which builds on topics over the years. Topics covered in Year 8 include: Digital Literacy, Discrimination, Drugs and Alcohol Awareness, Wellbeing and the Political System. Staff specialise in an area of delivery with the result being an expertise amongst the staff in approaching sometimes challenging topics. We ensure full coverage of RSE and the statutory expectations of the government guidance. As part of the PSHE programme, pupils investigate changing trends in the world of work, discuss the role of various jobs in society and practise negotiating skills to solve a problem.

Subject	Lessons/fortnight	Subject	Lessons/fortnight
Maths	6	Games	4
English	6	General Science:	8
Library	1	Biology	
History	3	Chemistry	
Geography	3	Physics	
RE	3	PSHE & RSE	2
French	3	Drama	3
Spanish	3	Computing	3
Art	3	Music	3
Food/DT	4		
PE	2		