



Castle Donington College

KS3 CURRICULUM YEAR 8
2016-17



ENGLISH

Course Overview

In studying English Language and Literature pupils develop skills in speaking, listening, reading and writing. Effective communication, both written and spoken, is at the heart of what we do. Pupils learn to express themselves creatively and imaginatively through the core texts and units within year 8. They learn to become enthusiastic and critical readers of stories, poems and plays as well as non-fiction and media texts.

Pupils are assessed in Reading, Writing and Speaking and Listening throughout year 8.

Course Breakdown

Transactional Writing – Writing for a purpose.
Persuasive Writing including adverts.

Writer's Voice – The Hound of the Baskerville's by Sir Arthur Conan Doyle

Shakespeare – Much Ado about Nothing

Conflict – The Canterbury Tales by Geoffrey Chaucer

Recent Writing – Studying a modern text as a class

Analysing Moving Image – Alice in Wonderland by Lewis Carroll

Assessment

Students will have a key assessment at the end of each unit. These will be linked to either English Language or English Literature. Throughout the year there will also be opportunities to assess Speaking and Listening. There will be an End of Year Exam in which students will be assessed formally for both English Language and Literature.

Organisation of groups

Students are taught in mixed ability tutor groups.

MATHEMATICS

Course Overview

'Maths is not just for School, Maths is for life' is the Mathematics Department's motto here at Castle Donington School.

During Year 8 we will build on knowledge gained in previous years. We aim to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasing complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

Assessment

In Year 8 all pupils work on the same topics, however more able pupils will be taught more difficult aspects of the topic. All pupils will work at a pace that is suitable to them to ensure everyone makes the maximum amount of progress during the year.

Pupils have regular unit based assessments throughout the year and an end of year examination to monitor attainment and progress.

Organisation of groups

Year 8 pupils have been set according to ability, using their results from year 7. We recognise that pupils change and that there will be a need to move pupils to faster or slower groups during the year. The decision is based on test results, performance in class, homework and examination results.

During the course of the year pupils may be placed in withdrawal groups for specific topics if individual areas for development are identified.

Course Breakdown

The Year 8 course has been divided into various topics. Pupils receive four 1 hour maths lessons a week.

Year 8 TOPICS	Very brief outline of topic
3D Shape	Names, properties and drawing of 3D shapes. Nets of 3D shapes. Edges Faces and Vertices. Plan and elevation drawings of 3D shapes.
Number	Apply the four operations, including formal written methods to integers and decimals. Calculations with negative numbers. Prime factor decomposition. Laws of indices. Interpret standard form.
Algebra	Simplify algebraic expressions. Expand a single bracket. Factorising by taking out common factors. Solving equations with unknown on both sides. Rearrange equations to change the subject of a formula.
Circles	Use a pair of compasses to accurately draw circles and part circular shapes. Identify the different parts of a circle. Calculate the area and circumference of a circle.
Fractions	Fractions of amounts. Compare basic fractions and their equivalent percentage and decimal values. Four rules of number including mixed fractions and different denominators. Use division to convert a fraction to a decimal.
Angles and polygons	Understand and use alternate and corresponding angles on parallel lines. Derive and use the sum of the exterior angles of a polygon is 360° . Know the sum of the interior angles of a polygon and use the formula
Volume	Know and apply formulae to calculate volume of right prisms (including cylinders)
Probability	The probability scale. Experiments. Tree diagrams and possibility spaces. Using fractions to calculate the probability of an event.

Fractions, decimals and Percentages	Percentage of an amount, Increase and decrease by a percentage. Repeated percentage change. Original cost before a percentage change.
Loci and Construction	Use of a ruler, pencil and compasses to construct triangles, angles and shapes. Represent the paths of points using mathematical diagrams.
Proportional reasoning	Equivalent ratios and how to cancel them down. Share an amount in a ratio. Word problems using ratio. Problems involving proportion.
Statistics	Interpret, analyse and compare the distributions of data sets. Graphs including pie charts and scatter graphs. Hypotheses and designing questionnaires.
Measures	Points of the compass. Draw and measure bearings. Units of measurement for distance, mass, capacity etc. Reading scales.
Graphs	Plot graphs of equations that correspond to straight line graphs. Recognise, sketch and interpret graphs of linear and simple quadratic functions.
Sequences	Generate terms of a sequence from either a term to term or a position to term rule. Deduce expressions to calculate the nth term of sequences.
Functional maths	These are mathematical calculations in everyday life. This topic is covered through-out the year.

SCIENCE

Course Overview

The Year 8 Science course is the second part of a KS3 course designed to equip students with the scientific skills, knowledge and understanding needed to be successful at G.C.S.E. and beyond.

Students will continue to study the 10 key scientific strands across year 8. These strands are, Forces, Electromagnets, Energy, Waves, Matter, Chemical Reactions, The Earth, Organisms, Ecosystems and Genes.

Practical investigation work is an integral part of the course across all years. It will allow students to develop the five essential scientific skills of, knowledge and understanding, application, analysis, concluding / evaluation and synthesis.

Organisation of groups

Students will have 3 science lessons per week and are streamed into Groups according to attainment.

The topics studied from the 10 key strands are:

Contact and Pressure. Magnets and Electromagnetism. Heating and Cooling. Doing work. Wave Properties and Wave Effects. The Periodic Table and Elements. Types of reaction and Chemical Energy. Climate and Earth Resources. Breathing and Digestion. Photosynthesis and Respiration. Inheritance and Evolution.

Assessment

Assessment will be by end of unit tests and a final end of year test.

COMPUTING

They use spreadsheets to plan for sales and understand budgeting and forecasting.

Course Overview

Year 8 students build in their existing knowledge from year 7 and are also introduced to new programming languages and more complex tasks based on previous work. Students program in Python and are introduced to the concepts of functions and arrays. Students are also taught e-safety in more detail than before and undertake a project where they manage a music festival.

Course Breakdown

Students receive one lesson of computing a week. A topic normally spans one half term.

1. E-Safety: Students are introduced to phishing, viruses, hacking, spyware, illegal websites and revisit cyberbullying.
2. Programming (Python): Students are taught the basics of python programming and create chat=bots, drawing packages and calculators.
3. Website Design: Using skills from year 7, students are taught how to use web authoring software to create more realistic websites. Students are also taught about the workings of the internet and how marketing companies work.
4. APP Design: Using online software students are taught how to build mobile phone apps. Interface design is the main focus, along with understanding how to transfer existing programming skills in to a new language.
5. Concert Project: Students plan and manage their own music concert. Based around graphic design students create their own advertising leaflets and other marketing.

Assessment

Students are assessed on an ongoing basis in lesson with mini targets. During a topic student submit a final piece of completed work or a draft if part way through. This is graded and fed back to students. Throughout the year students undertake tests on the computer using Yacapaca.com.

Organisation of groups

Students are taught in Tutor Groups.

HISTORY

Britain 1750-1900

In this topic pupils will learn about the period of the Industrial Revolution. They will begin by looking at how far Britain changed in this period by studying industry, agriculture and transport. They will study the lives of people in Victorian Britain both at home and at work. Finally they will study the British Empire and slavery.

Pupils will be assessed by an end of unit test that will assess their level of knowledge. They will also be assessed through three written tasks that will test their understanding of second order concepts such as cause and consequence, their ability to work with historical sources and to investigate historical interpretations.

The Edwardians

In this topic, pupils will study the period between 1901 and 1919. They will begin by looking at society in Britain at the beginning of the period and the Liberal Government's reforms. They will then learn about the life of women and the Suffragette movement before looking at an in depth study of the causes and events of the First World War.

Pupils will be assessed by an end of unit test that will assess their level of knowledge. They will also be assessed through three written tasks that will test their understanding of second order concepts such as cause and consequence, their ability to work with historical sources and to investigate historical interpretations.

GEOGRAPHY

Employment

In this unit pupils will begin by studying the four sectors of industry before going on to study each of these in more depth using local examples. They will study UK farming, location factors for industry and tourism.

Pupils will be assessed by an end of unit test that will assess their level of knowledge. They will also be assessed through written tasks that will test their understanding of the environment and sustainability, their geographical skills and their ability to complete a geographical enquiry.

Transformations

In this topic pupils will learn about weathering where they will complete a local fieldwork study at St. Edward's Church. They will then go on to study coastal erosion and management with a focus on the Holderness Coastline. Finally they will look at glaciation and its effects on the landscape.

Pupils will be assessed by an end of unit test that will assess their level of knowledge. They will also be assessed through three written tasks that will test their understanding of the environment and sustainability, their geographical skills and their ability to complete a geographical enquiry.

RELIGIOUS EDUCATION

Morality

In this topic, pupils will look at whether being religious helps you to be good – looking at a range of religious and worldviews. This will include the opportunity to learn about meditation and study of Humanism.

Pupils will be assessed by an end of unit test that will assess their level of knowledge. They will also be assessed through a written task that will determine their ability to evaluate critically the religious and worldviews that they have studied in this topic.

Expression

In this topic pupils will learn a range of ways that religious people express their spirituality. They will have the opportunity to try these methods for themselves by creating geometric patterns, mandalas and Shinnyo-en lanterns and then evaluate how far these methods can be used to express spirituality. They will also create their own piece of spiritual artwork which they will then evaluate and compare with the other methods that they learned during this unit.

Pupils will be assessed by an end of unit test that will assess their level of knowledge. They will also be assessed through a written task that will determine their ability to evaluate critically the religious and worldviews that they have studied in this topic.

Peace and Conflict

In this topic pupils will learn about religious and worldviews and about peace, war and conflict. They will determine whether religion can justify war and what actions religious people take to try and live in a peaceful world.

Pupils will be assessed by an end of unit test that will assess their level of knowledge. They will also be assessed through a written task that will determine their ability to evaluate critically the religious and worldviews that they have studied in this topic.

DESIGN

The Design department at CDC offer a broad range of subject at Key Stage 3. We combine practical and theoretical tasks, design development skills and creative thinking to design and make exciting products to meet individual needs.

We teach our pupils how to design products to develop their own quality of life, looking to the future and allowing each individual to see how they can become innovators of design whilst also being aware of their environment and the planets need for sustainability.

Food Technology

Moving into year 8 we develop our skills and understand of food from other cultures in the topic Food around the World, creating such dishes as Italian scone based pizza, Oriental sweet and sour chicken and Greek Moussaka. We look at how meals can be adapted to suit your family.

Product Design

In Product Design students work with CAD CAM technology to develop their understanding of the world of industry and how technology can design and create ideas with us. Examples of projects from year 8 include Door Signs.

Resistant Materials

In Resistant Materials pupils spend time getting their hand on tools and hard materials to create a variety of different products using wood and plastics. In year 8 we add in the principles of electronics and pupils design their own Amps. We also design and create jewellery boxes using a variety of hard and soft woods and hand working techniques.

Graphic Design

In Graphic Design we focus on the fundamentals of drawing throughout Key Stage 3. We focus on

presentation, 2d 3d and perspective drawing, both by hand and how to develop drawings for industry using CAD. We investigate the design process and how the notion of developing ideas can ensure a final design always meets the needs of the user.

Art

As students' progress through Key stage 3 in Art, they explore and develop a variety of key skills and in Year 8, the students focus on drawing; painting and clay modelling skills. The project is all about Mythical Creatures and starts off with students producing critical drawing studies of Albrecht Dürer's 'Rhinoceros'.

Textiles

In Textiles students learn about the different types of fabrics and their suitability for different circumstances. They will use sewing machines in all the projects in KS3 developing their skills through a variety of applications. Year 8 projects focus on 3D construction through making either doorstops, juggling balls or monsters.

MODERN FOREIGN LANGUAGES

Overview

As an innovative department we are constantly developing. We create our own resources and do not follow a specific text book. This enables us to tailor make resources and differentiate our teaching to meet the needs of individual students. Students are taught in mixed ability tutor groups in half year populations allowing us the flexibility to adapt our teaching. This enables us to ensure that our students make good progress and have a real sense of achievement after every lesson.

A range of teaching methods are used to engage and challenge learners and to promote independent learning. Target language is used in all lessons and phonics sounds are systematically taught throughout the key stage.

Equal emphasis is placed on - Listening, Speaking, Reading, Writing and Translation.

A range of resources to support learning are available both in classrooms and in the library. We subscribe to several languages learning websites for example linguascope and, which students are able to access from home and via tablets/phones. Students are also provided with further links to recommended websites.

We are committed to activities outside the classroom. Individual advice and tuition is available at lunchtimes and an after school French club provides additional support. Students also have the opportunity to watch and study notable films from French cinema.

Students are encouraged to discover, discuss, debate unfamiliar lifestyles, and to give their own understanding of the world around them.

Assessment

In language lessons, students will:

- Read and listen to spoken and written forms of the language in the classroom and beyond drawn from a range of materials including some from authentic sources.
- Communicate in the target language individually, in pairs and in groups, expressing themselves and responding in various situations and on a variety of topics.
- Learn and use a range of vocabulary and apply grammatical structures of the target language.

Students are continually assessed within languages lessons, using both formative and summative assessments and students regularly use self and peer assessment in class. Summative assessments usually take place at the end of each unit of work. We regularly give detailed feedback to students regarding their achievement and communicate to students what they need to do to make further progress in their learning.

Year 8 Topics

- Television, films, books, the internet
 - My family
 - My house: describing area where I live, describing my house, comparing rooms in the house
 - Food and Drink: meals, quantities, recipe, organisation for a party
 - Body parts and feeling unwell
 - Places in a town/directions
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MUSIC

Overview

Students will experience the creativity of music through performing, composing, listening and appraising. We are dedicated in enabling students to build skills and enthusiasm in all these key areas. We will challenge our students to perform, compose, listen and appreciate in a range of styles, including classical, popular and world music. Music appreciation will stimulate students to confidently discuss the works of professional artists, as well as evaluating their own work. Students will be taught musical notation and theory to support their practical work. The Key Stage 3 course will lay the foundations for further study in GCSE Music.

Students will be encouraged to take up individual singing or instrumental tuition on any instrument with one of our 10 visiting peripatetic music teachers. The music department offers a range of extra-curricular opportunities, e.g. Junior and Senior Orchestras, Singing Group and Musicals. More advanced Key Stage 3 students will be invited to join the more advanced senior groups. Pupils perform in college concerts as well as participate in local competitions and festivals.

Assessment

All pupils receive one hour of classroom music per week as part of the curriculum. A different unit of work is taught every half term. Pupils are taught in their form groups and are assessed on an informal basis throughout every lesson, leading to a formal assessment at the end of each unit of work. The criteria to be assessed, is always shared with the pupils and immediate feedback is given. Discussion and peer assessment are regularly included. All topics learnt at KS3 encompass the key skills of performing, composing, listening and appraising.

Course breakdown

The Staff – understanding more complex staff reading through performing.

Melody writing – composing a melody within a named structure.(AABA)

Chords and harmony (1)– understanding harmony of different chords by performing “Charley Marley”.

The Blues – Pupils learn to play the 12 Bar Blues and improvise using the Blues scale.

Folk Music – pupils learn of compound time through performance.

Variations – performance of Pachelbel’s canon.

Organisation of groups

Pupils are taught in their tutor groups.

PHYSICAL EDUCATION

Course Overview

Pupils will build upon and embed the physical development and skills learnt in Key Stage 2, become more competent, confident and expert in their techniques, and apply them across different sports and physical activities.

They will understand what makes a performance effective and how to apply these principles to their own and others' work.

They will develop the confidence and interest to get involved in exercise, sports and physical activities outside of school and carry this forward into adult life; appreciating the long-term associated health benefits of an active lifestyle.

Course Breakdown

Pupils will be taught to:

- use a range of tactics and strategies to outwit opponents in direct competition through team and individual games [for example, badminton, basketball, cricket, football, hockey, netball, rugby]
- develop their technique and improve their performance in other competitive sports [for example, athletics and gymnastics]
- perform dances using advanced dance techniques in a range of dance styles and forms
- take part in outdoor and adventurous activities which present intellectual and physical challenges and be encouraged to work in a team, building on trust and developing skills to solve problems, either individually or as a group
- analyse their own and others' performances and demonstrate improvement to achieve their personal best

- take part in competitive sports and activities outside of school through community links or sports clubs

Assessment

All pupils will be assessed practically using the 1-9 AQA grading criteria. Such teacher assessment will be moderated both internally and externally.

Organisation of Groups

All pupils will be taught in their tutor groups unless a specific activity lends itself better to split sex or ability groupings.

All year groups will study the same breadth of sports to ensure we maintain an inclusive curriculum and provide pupils with the best opportunities to succeed. Our schemes of work are therefore designed to ensure all pupils are taught in accordance with their ability levels and not simply which year group they are in.

PSHEE

Course overview

PSHEE prepares our young people to be thoughtful citizens in a globalised world. Students engage with a wide range of contemporary issues and learn how to listen and empathise with others.

Course breakdown

Students have one lesson a week. The units studied are:

- Emotional Wellbeing
- Careers Education, Information and Guidance
- Relationship and Sex Education
- Influences and Risks
- Human Rights

Assessment

Unit success criteria are reflected upon throughout the year. Class discussion and questioning enables staff to assess the understanding of students.

Anonymous questionnaires allow students to freely share their opinions and views after a unit has been completed.

Organisation of groups

Students are taught in tutor groups by their class tutor.
