ARTHUR MELLOWS VILLAGE COLLEGE

YEAR 8

SUBJECT SUPPORT GUIDE

2022/23

WISE OWL

'When schools, families and community work together to support learning, children tend to do better, stay in school longer, and like school more'.

- Southwest Educational Development Report (2002)

ARTHUR MELLOWS VILLAGE COLLEGE

Introduction

Dear Parents

It is essential that each and every student achieves their potential and feel that they are successfully achieving and progressing during their time at AMVC. To assist a student to maximise their potential, it is vital that we develop and encourage a culture of study. With the introduction and implementation of new GCSE specifications there is an increasing need for our students to be resilient, robust, independent learners so as to achieve the best possible outcome to decide their future paths. Parents are a very important part of this process in influencing their child's success and achievement rate at school. We are often asked by parents how they can help support their child's learning at home. This guide has been produced to assist parents in supporting their child's education in helping them reach their potential. This booklet looks at the following areas:

- Subject by subject breakdown of the various topics your child will be studying during the academic school year. It will offer strategies and guidance of how to be involved in helping your child learn for their class assessments.
- Study strategies.
- Encouraging a study culture at home.
- The importance of homework, planner checking and homework club.
- The importance of independent reading.
- Dinner time discussions.

We hope you find this guide useful. Should you have any queries relating to subject matters, there are contact names on each subject page. Alternatively, you could contact your child's Form Tutor or Head of Year.

http://www.bbc.co.uk/bitesize

BBC Learning Parents

askus@familylives.org.uk.

family lives

http://www.dad.info/education/

DAD.info

Please note this information is correct at time of going to print. Content is subject to change at any time due to curriculum reviews and policy decisions. Please check with your child's Subject Teacher if unsure on any aspect.

ARTHUR MELLOWS VILLAGE COLLEGE

Encouraging a study culture at home

As your child progresses into Key Stage 3, there is the expectation that your child will build on skills already learnt and start to consolidate them in the next year. It is also important to remember that whilst your child will be focusing on new topics, it is vital that they do not forget about topics they learned in previous years. By implementing the strategies below, you are encouraging a healthy study habit in your home, at an early age. As your child matures, this will become a natural process for them as they go into their exam years. It is important that this study habit starts at an early age. Students should study bite sizes of topics during the school year rather than leave it to last minute cramming. A slow and steady build-up of studying different topics and subjects allows students to feel that they are organising their workload in a more manageable way.

Keeping this in mind, it is advisable to do the following:

- Have a designated time of study each day for your child.
- Set them up in a place where they can study quietly and have space to do their work and for their books.
- Choose one subject every week where you will focus on one topic that needs to be re-studied and remembered. So, for example, study the heart in Biology for one week.
- What type of learner is your child? Is she/he a visual/auditory/kinaesthetic learner?
    - If your child is visual, then it will help your child to write or draw out their answers.
    - If your child is auditory, then your child learns best by hearing and speaking out their ideas.
    - Most students are often a combination of two types of learning: visual/auditory for example.
- Set your child a mini quiz, so by the end of the week, they have to answer verbal questions by you about the topic you have agreed on. This will check how much they can remember.
- Look and see what dates their teacher assessments are on, and on what topics, so you can keep reminding them what they need to study and when.

ARTHUR MELLOWS VILLAGE COLLEGE

The importance of homework

It is important to separate the idea of homework from study. Study is the long term revision of subjects and topics, revising over already studied material with the view to committing it to long term memory. Homework is the day to day practice of your present subjects and topics, and consolidating the knowledge the student has acquired in class to doing it by him/herself at home. Homework is the first step by the student in working independently on a topic that was first introduced by the teacher. To help support your child with homework:

- Set up the expectation that homework will be done at a certain time every day.
- Ask what homework they have and look in their planner to see what they have written down.
- If no homework has been written down, look at their planner and see what subjects they have had had that day and ask them to talk to you about what they did in class.
- Check with them when homework is due. Look at their timetable for the following day and see what homework is due in. There is usually a minimum of 48 hours turn around for students to hand in homework.
- Around the dinner table, enquire what your child has learned today or was there anything of interest that they learned, this will also allow your child to recall and relay newly acquired information.

'Education is the most powerful weapon we can use to change the world'

- Nelson Mandela.

ARTHUR MELLOWS VILLAGE COLLEGE

Independent reading

The importance of reading cannot be underestimated especially with the introduction of a much more rigorous and challenging exam system. It is important that your child has a strong reading age for the following reasons:

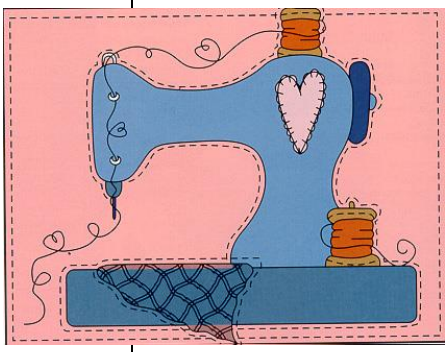
- Most texts at GCSE have an average reading age of 14-15 years of age. By having a strong reading age, it will give students a better chance to access and comprehend the curriculum.
- By having a strong reading age, it will help students to understand exam papers and what the questions are asking of them.
- By reading independently, it gives students creative ideas. It improves their word recognition for spelling and punctuation and increases their vocabulary knowledge.
- By reading a student is exposed to new ideas and concepts, that will allow them to make deductions, inferences, create images in their heads and make connections across subjects.

All of these skills are necessary for a student to do well in exams. To encourage reading:

- Ask your child “have they visited the library at AMVC?” An incredible, well stocked resource. Each Year Group has a designated day to visit the library.
- Students can take out books and return them. The Librarian will order anything that they might have an interest in. Encourage your child to take a book out. Ask them to read to you, a page a night.
- There are lots of literacy competitions that are run throughout the year that encourage independent reading. Enquire as to what they are and encourage your child to be involved.
- Ask your child, what genre of book do they like? Why?
- Get your child to read a wide variety of reading material: newspapers, magazines, novels, plays, short stories, etc.
- See the recommended reading lists published in the Summer edition of the newsletter.

Art & Textiles

Art and Textiles			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Sept-Dec	**Surrealism:** • Contextual and practical work inspired by the Surrealist movement • Sculpture. 3D construction using cardboard	For each project students are assessed on both their practical classwork and their contextual homework. The final grade for each project is worked out from both the homework tasks and the practical classwork.	• Read through the homework task sheets to ensure understanding. • Encourage good research skills on homework tasks. • Discuss the classwork with students to help them describe their work using subject specific words.
Jan-April	**Soft sculpture:** • Complete a project based on identity using Textiles as a medium to create a soft sculpture • Contextual links to other cultures and time periods • Textiles construction • Fabric manipulation		
May-July	**Graphic Art:** **Poster design** • Investigate poster design from different historical time periods and examine the use of font and images used in poster design • Produce a poster using influences from different time periods • Contextual research into specific time periods and design movements		



Useful Websites:

National Gallery	www.nationalgallery.org.uk
Saatchi Gallery	www.saatchi-gallery.co.uk
Artcyclopedia	www.artcyclopedia.com

Staff Contacts:

Mrs Mitchell	Head of Art

Computing

Computing			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – November)	**Unit: Key Skills:** • Logging in ICT rules/folder structure/substructure reminder/SharePoint and OneDrive • Recap on using Teams and emails • Business templates in Office applications **Unit 1: Programming Techniques (Python):** • Introduction to Python, input, output and variables • Arithmetic operators • Logical operators • Selection • Iteration • Interim Test on knowledge • Problem solving • Final assessment on practical skills Self-assess and reflect and correct	I Interim Test – input, output, variables, arithmetical and logical operators, selection an iteration Final assessment Python project HW – Topic Quizzes/Seneca	Practice accessing documents at home using OneDrive and SharePoint Use https://replit.com/ to practice coding Python tutorials at https://www.w3schools.com/python/ https://www.codeacademy.com/learn/learn-python
Autumn 2 (November - January	**Unit 2: Animation** • Add, delete and move objects, scale and rotate • Use a material to add colour to objects • Add, move and delete keyframes to make basic animations • Play, pause and move through an animation using a timeline • Interim test on concepts learnt • Join multiple objects using parenting	Interim test – concepts learnt Final Assessment on concepts learnt HW – Topic Quizzes/ worksheet	Use Blender to practice skills covered in lessons You Youtube to learn animation techniques Revise animation theory using quizzes provided

	• Use edit mode and extrude • Use loop, cut and face editing • Use proportional editing • Use the knife tool and subdivision • Add and edit set lighting • Create and render animation • Final assessment on concepts learnt		
Term 2: Spring 1 (January – March)	**Unit 3: Algorithms** • Decomposition • Pattern Recognition • Abstraction • Algorithms • Creating flow charts including using selection and iteration • Interim Test • Pseudocode including INPUT, OUTPUT, IF…THEN, IF…THEN…ELSE, IF…THEN…ELSE IF…ELSE statements, FOR, WHILE and REPEAT UNTIL loops • Final assessment – Test Self-assess and reflect and correct	Interim test on decomposition, pattern recognition, abstraction, algorithms, creating flow charts Final test as interim including pseudocode HW – Topic Quizzes/Seneca	Practice using the flowchart symbols to create a range of flowcharts for everyday tasks such as getting ready to go to school. Problem solving games at these websites: https://csunplugged.org/en/at-home/ https://www.bebras.uk/ hhtp://www.cs4fn.org/puzzles/
Spring 2 (March–May)	**Unit 4: Data Representation:** • Describe examples of representation • Character coding schemes (ASCII) • Binary Digits • Convert decimals into binary • Unit conversions and physical representation of binary digits • Interim Test • Binary to decimal conversion • Problem solving • Final Test • Self-assess and Reflect and correct	Interim Test on character coding, binary digits, decimal to binary conversion, unit conversions and physical representation Final test as interim including binary to decimal conversion HW – Topic Quizzes	Watch these videos: Binary Representation https://youtu.be/1GSjbWt0c9M Binary and Data https://youtu.be/USCBCmwMCDA STEM Learning website for home learning https://www.stem.org.uk/resources/collection/478586/ks3-data-representation

Summer 2 (May – July)	**Unit 5: Spreadsheets:** • Recap on layout, cells formatting • Basic formulae with cell references and autofill • Functions including SUM, COUNTIF, COUNTA, MAX. MIN, AVERAGE • Interim assessment of concepts learnt • Conditional formatting and charts • Selection to Excel with If statements • Final assessment of concepts learnt	Observations of skills used in lesson activities Interim assessment of skills learnt Final assessment of skills learnt HW -Topic Quiz's/ worksheet	Spreadsheet tutorials on: https://edu.gcfglobal.org/en/excel
End of year test	**End of year test on IT units** **End of year test on CS units**		Students should use Interim and final assessments along with classwork and quizzes to revise

Useful Websites:

W3schools	https://www.w3schools.com/python/default.asp Tutorials for a range of Programming languages
STEM learning	https://www/stem.org.uk/home-learning/secondary-computing Computing resources for home learning
Teach ICT	www.teach-ict.com Tutorials and educational quizzes
Blender	https://www.blender.org/ Free software for creating animations
GCF global	https://www/blender.org/en/excel
BBC	www.bbc.co.uk/technology Topical IT news from around the world
BBC Bitesize	https://www.bbc.com/education Learning resources
Seneca	Seneca – Learn2x Faster (senecalearning.com) Learning platform for all subjects

Staff Contacts: Mrs M Richards - Head of Computing
Mrs T Mayhead - Second in Computing

Design and Technology

Product Design (Technology)			
When	**List of Topics**	**Assessment**	**What can a parent do to support?**
Terms 1, 2 and 3 (September – July) All topics are taught to different groups at different times but students will cover all of the topics throughout the year	**Drawing Skills** Identify what is one-point perspective and how it can be used in design ideas. Review how tone can be used to highlight surface material and texture. Review what techniques are involved in creating detailed one-point perspective street art. **Clock** Identify what is involved within a specification to create a product aimed at a specific target market. Review design inspired work of others from the Memphis design movement. Identify how to create products using CAD and CAM skills, reviewing materials properties. In depth evaluation on project demands and new process learnt. **Structures** Identify how structures are created to withstand forces. Class competitions take place within the structure theme. **Brand Identity** What is a brand identity? How is brand identity created? What is in a brand name, logo, slogan? Identify what is in packaging and how 2D nets are created to make a 3D shape.	All project work is marked in accordance with GCSE expectations. There is a particular focus on design, make and evaluate. Each project will have 3 assessment points. Students will review all the processes they have learnt and used through self-assessment, peer assessment, evaluations and levelling.	Encourage your child to read any newspaper/ magazine articles on technology. Encourage them to watch any programmes on television about technology. Review making techniques. Practice drawing scale models using drawing techniques. Visit design inspired museums. Encourage use of revision websites Create products at home, encouraging creativity and imagination. Review designers both past and present.

Staff Contacts:

Mr Dewdney Head of Design and Technology

Drama

Drama			
When	**Topic**	**Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – October)	**Introduction to Genre**	**Group Practical** A cross-cut between two different genres. Assessed on cross-cutting and practical application of the styles.	What are the key features of: • Sci-fi • Soap Opera • Slapstick • Western • Gothic Horror
Autumn 2 (October - December)	**Pantomime**	**Group Practical** A group pantomime including breaking the forth wall, exaggerated stock characters and use of a fairy-tale.	• Which stock characters do you expect to find in a Pantomime? • Rehearse your stock character and a line they say working with levels of exaggeration 1-10
Term 2: Spring 1 (January - February)	**Devising: Night-Life**	**Group Practical** A devised piece which includes individual monologues. Assessed on posture, gestures, facial expression and PPPTVI.	Support learning lines for the monologue • **The blank paper technique** Placing a blank piece of paper over the monologue and learning one line at a time • **The cue card technique** Handwriting the monologue in 5 equal sections onto 5 separate cue cards and learning each section one at a time • **Testing** A parent/carer follows the monologue script as you read it, they stop you if you make a mistake
Spring 2 (February – April)	**Melodrama**	**Group Practical** A scripted melodrama performance. Assessed on exaggerated characterisation: posture, gesture, PPPTVI, gait and use of 1880's stock emotions.	Practical testing of the following stock emotion shots: • Grief • Fear • Horror • Love (male/female) • Evil planning • Evil sneaking • Anger • Overwhelmed

Term 3: Summer 1 (April - May)	**Sections of Script**	**Group Practical** A group (pair of trio) performance of a scripted piece. Assessed on mime, inclusion of stage direction and characterisation (posture, gait, gesture, PPPTVI).	• Line testing (as above in Devising: Night-Life) • Stay in role for 5 minutes as one of the characters from the scripted piece • Hot seating (i.e. ask questions which students have to respond to in role).
Summer 2 (May - July)	**Radio**	**Group Practical** A devised radio advert. Assessed on use of sound effects, body percussion and PPPTVI.	• Rehearse lines for radio play • Recap 'Drama Terminology' from the sheet.

Additional information:

During assessments, students develop their writing of reviews by completing a self and peer-assessment in their assessment booklets. These are always completed during the lesson, however, you are still able to support at home by recapping Drama terminology and definitions.

Books and Websites

- https: //www.youtube.com/watch?v=mpjEyBKSfJQ (Charlie Chaplin – The Lion's Cage)
- www.nationaltheatre.org.uk
- http://www.bbc.co.uk/bitesize/ks3/english/speaking listening/drama/revision/1/
- McGuire, B., The Student Handbook for Drama: Ideal for Key Stages 3 and 4

Further Study / Extra-Curricular

- Whole School Production
- Key Youth Theatre www.kindreddrama.com
- Open auditions at 'The Cresset'
- Wildcats Summer School
- Seeing live theatre (we encourage students to go to the theatre when possible)

Staff Contacts:

Miss Maher Head of Drama

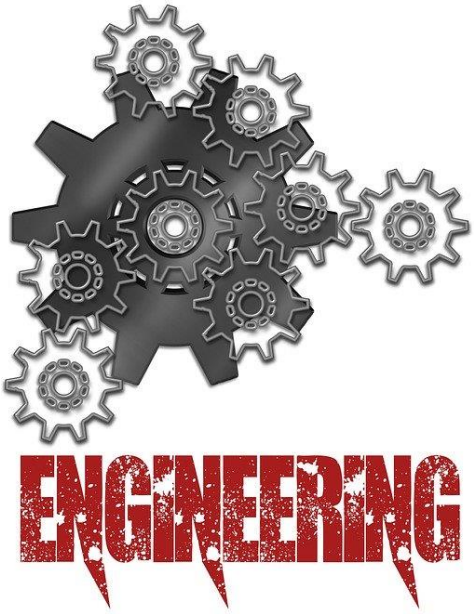
Engineering

Engineering			
When	**List of Topics**	**Assessment**	**What can a parent do to support?**
Terms 1, 2 and 3 (September-July) Design Technology subjects operate on a carousel system, so different groups will have engineering during different terms, however all students will have covered the topics shown by the end of the academic year.	**Topic 1: Engineering drawing skills including:** • Orthographic drawing • 2D and 3D drawing views • The use of scale and proportion in drawings • Dimensions and measurements on working drawings **Topic 2: Tea Light Holder** • Analyse a Design Brief • Identify user needs and performance requirements for a product • Create a design specification using research • Research different joining techniques and methods used for engineering materials • Develop design ideas for a product using research and problem-solving skills • Model and test design solutions to identify a final design • Plan the manufacture of a product, including safety and quality considerations • Take part in practical activities, working with tools and equipment in a workshop • Understand the working properties of engineering materials and select tools and equipment to shape/form them • Understand and apply safe working practices in a workshop • Evaluate their work to identify improvements and opportunities	Each element of both projects has 3 assessment points. Students will complete end of topic assessments which allow students to review and apply skills and processes covered in the term.	Encourage your child to take an interest in why products are designed the way they are. Talk about the end of life for a product, how different materials must be disposed of in different ways and how it can impact on the environment. Visit exhibitions or museums with engineering. science or technology links. Watch documentaries or YouTube videos such as ‘How it’s Made’ or ‘How Stuff Works’ to help your child understand the resources, energy and work that goes into manufacturing a product. Encourage the practice of drawing techniques at home. Use engineering of STEM project kits at home, LEGO or other construction kits to explore engineering principles such as mechanisms.

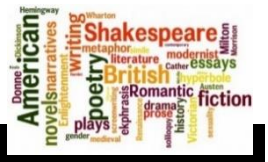
	Topic 3: CAD/CAM Product – Key Organiser • Research and identify the benefits of CAD/CAM to engineers and designers • Investigate types of CAM machinery • Understand how CAD/CAM is used in the development of engineered products • Use CAD (computer aided design) to develop a final design proposal • Use CAM (computer aided manufacture) to make a final product • Evaluate their work to identify improvements and opportunities		Use Browser based CAD programs to develop design skills such as **Sketchup Web** and **Fusion 360 student edition**.

Staff Contacts:

Mr Chegwidden Head of Engineering
Mr Dignall Teacher of Engineering and Technology



English



English			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – October) Autumn 2 (October-December)	Gothic A study of Gothic fiction including 19th Century novels	Write a creative gothic story.	• What techniques are used to write descriptively? • Find an image of a storm and ask them to write creatively for ten minutes. • Improve vocabulary by choosing one work for the week and using it confidently and fluently in a sentence. • Ask for a verbal summary of one of the extracts studied. How does it fit the Gothic genre? • Ask them to talk about the different characters. How do they fit in the Gothic genre? • What makes a novel Gothic?
Term 2: Spring 1 (January-February) Spring 2 (February-April)	My Sister Lives on the Mantlepiece, Annabel Pitcher	An extended analytical response based on one of the themes of the novel.	• Review and test spellings in English homework book. • Recount/summarise the main events of the novel so far. • What are language techniques? • What are structural techniques? • What issues have the characters faced in the novel? How have they overcome them?
Term 3: Summer 1 (April - May) Summer 2 (May-July)	A Midsummer Night's Dream William Shakespeare	An extended analytical response based on the themes of the play. A piece of non-fiction writing in which students will be asked to express their viewpoint on a topic.	• What are the main themes presented in Shakespeare's play? • Summarise the main events of the plot. • Create a character profile for key characters of the play. • How do you make your viewpoint convincing in a piece of writing? • What ideas do you have for your final viewpoint piece? • What order are you going to present your ideas in your final piece of work?

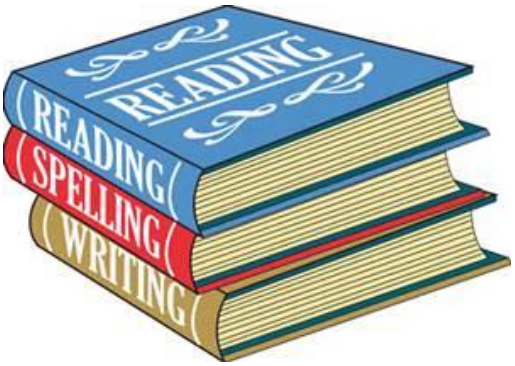
Helpful Books/ Study Materials:

Please encourage your child to read as many different types of literature as possible; newspapers, books, graphic novels, poetry and auto biographies all help! You could inspire writing tasks such as short stories about weekends or holidays and poems about the family!

Useful Websites:
BBC Bitesize
Oak National Academy
www.bbc.co.uk/skillswise

Staff Contacts:
Primarily, your child's English teacher is the best person to contact. They will be able to provide you with your child's target grade, current level of progress and any specific targets given.

Miss N Jeffs Head of English
Miss L Redfearn Key Stage 3 Coordinator for English



FOOD

FOOD			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Week 1 - 2	• Baseline test • Nutrition • Swiss Roll practical	Baseline test TA evaluation Homework	• Look up Swiss roll recipe on SharePoint or TEAMS
Week 3 - 4	• Carbohydrates • Pasta Salad practical	Homework 2 Carbohydrates PA practical	• Look up pasta salad recipe on SharePoint or TEAMS
Week 5 - 6	• Fibre • Enzymic browning investigation • Fruit Crumble practical	TA investigation TA evaluation Homework 2 Definitions	• Look up fruit crumble recipe on SharePoint or TEAMS
Week 7 – 8	• Low fat Pizza Nutritional analysis program • Pizza practical	SA practical	• Look up low fat pizza recipe on SharePoint or TEAMS
Week 9-10	• Vegetarianism • Taste Test vegetarian products	Homework 3 Reading H/W on Quorn	
Week 11-12	• Vegetarian Bolognese practical • Revisit baseline test	TA Evaluation Baseline test	• Look up Bolognese recipe on SharePoint or TEAMS

Additional information:

Recipes can be found on the school website

Useful websites:

https://www.nutrition.org.uk/
http://www.foodafactoflife.org.uk/

Staff Contacts:

Mrs R Bowman – Head of Food
Mrs D Curran – Teacher of Food

Geography

Geography			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1	Map skills Mapping European Geography Urban Geography	European map test (human and physical features) Urban end of topic test – GCSE style questions	• Test on European Geography. For example, location of countries, names and locations of mountain ranges, etc. • Take their son/daughter for a journey across Peterborough to explore the differences in areas and discuss places nearer or further from the city centre.
Autumn 2	Economic development	Economic development end of topic test – GCSE style questions	• Encourage their son/daughter to carry out extra research about the causes of poverty in African countries. Make notes under the following headings: Colonialism/War & Conflict/Diseases.
Term 2: Spring 1	Population	GCSE Exam style questions	• Ensure their son/daughter knows what PEEL stands for. • Encourage extra research about the issues around population, for example, overpopulation or ageing populations.
Spring 2	Migration 	GCSE Exam style questions	• Encourage extra research about migration and make notes under the following headings – Push and Pull factors; Impacts (positive and negative on host and source countries); Management. • Have a discussion about migration. • Create a family tree which could show relatives who have moved around the UK; to the UK from another country; or vice-versa.
Term 3: Summer 1	Coasts	End of Year exam	• Test using the revision materials available from the school SharePoint • Encourage use of a KS3 revision guide. For example, CGP Geography Revision Guide (ISBN 9781841463926). • Encourage the use of the BBC Bitesize website.
Summer 2	Geographical fieldwork	Fieldwork write-up	• Get your son/daughter to practice asking family members • Questionnaires or surveys they have created. • Take your son/daughter to a river, coastal area, etc and encourage them to sketch this area.

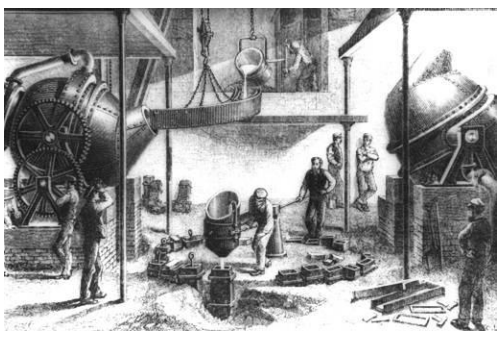
Useful Websites: BBC Bitesize KS3 website and Seneca
Staff Contacts: Ms Veale Head of Geography

History

History			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – October)	**Can the execution of Charles I be described as a TURNING POINT in History?**	Assessment based on defining a 'turning point'	• Discuss: Who was more to blame for causing the Civil War; Parliament or the King? • Were they right to execute King Charles I? • Cromwell – Hero or Villain? • Why was Charles II put back on the throne?
Autumn 2 (October - December)	**Which revolution brought the most change and why?**	Significance Assessment	• Which revolutions have you studied? • Why did they bring so much change?
Term 2: Spring 1 (January - February)	**If you are described as 'the man who built the world' does that make you the most important person from the Industrial Revolution?**	Impact Assessment	• How do you work out whether someone is important / successful? • What has made the people we have studied so influential? • Why do you think women we have studied not had the same recognition as the men?
Spring 2 (February – April)	**How should we remember the British Empire?**	Interpretations Assessment	• Can you define empire? • Which countries were part of the British Empire? • What were the experiences of the people in the British Empire?
Term 3: Summer 1 (April - May)	**Why did the Transatlantic slave trade continue unchallenged for so long?**	Reasoning Assessment	• Why did so many people support slavery? • Which people can you name who helped to bring about abolition and why did they want this?
Summer 2 (May - July)	**To what extent has life improved for Black Americans since the abolition of slavery?**	End of Year Assessment	• Can you name key events in the Civil Rights movement? • Do black Americans have equality today? If not, why not?

Useful Websites:
BBC www.bbc.co.uk/history/forkids
Oak National Academy

Staff Contacts:
Primarily, your child's History teacher is the best person to contact.
Mrs K Price Head of History



Maths

Maths

In mathematics your child will study a wide range of topics each half term. The precise topics your child will cover is dependent on their set, general topics are detailed below, please note that the order and depth these are completed in will be group appropriate.

Half term 1	• Be able to identify different types of numbers eg; Square, cube and prime numbers • Find the factors and multiples of a number • Be able to find the highest common factor and lowest common multiple of pairs of numbers • Prime factors • Algebra simplifying expressions • Converting between different units of measurement • Calculate the area and perimeter of 2D shapes including rectangles, triangles, parallelogram and trapeziums • Add subtract, multiply and divide fractions including mixed numbers • Add, subtract, multiply and divide negative numbers • BIDMAS
Half term 2	• Sequences, generating and finding the rule • Rounding and estimation • Simplifying algebraic expressions • Expanding and factorising algebraic expressions • Calculating mean, mode, median and range • Graphical representations of data including bar charts, line graphs and pie charts • Coordinates in all four quadrants
Half term 3	• Angle facts and finding missing angles at a point, on a straight line and in shapes • Finding missing angles in parallel lines using correct vocabulary • Area and circumference of a circle, progressing to parts of circles • Using a scientific calculator • Using a formula • Real life graphs • Drawing and finding the equation of graphs • Scatter diagrams and correlation
Half term 4	• Volume of 3D shapes • Solving equations • Rearranging formulae • Ratio • Scale diagrams and scale factors • Equivalence of fractions decimals and percentages
Half term 5	• Percentages of amounts including percentage increases and decrease • Percentage changes • Interest and depreciation • Constructing 2D shapes using a ruler, protractor and a pair of compasses • Probability • Inequalities • Loci
Half term 6	• Reflections, rotations, translations and enlargements • Calculations with decimals without a calculator • 3D shapes, nets and surface area • Pythagoras' theorem

Each half term your child will be provided with a list of key vocabulary that links to the topics covered during that period. It is essential use I their understanding of the subject and as such both words and definitions should be learnt.

In the week before October half term, the week before Christmas, and the week before February half term your child will complete a written assessment to test their understanding of the topics that have been covered in that half term. These assessments take place during their normal Mathematics lessons, with the exact date of these being identified to your child by their class teacher.

Your child will also complete their Year 8 examinations for Mathematics later in the year. There will be two papers, a calculator paper and a non-calculator paper. Your child will be provided with some revision material before the examinations to help them prepare for this.

What can parents do to support?

- On a weekly basis, if possible, discuss with your child the mathematics they have covered in lessons and ask them to explain the methods to you.
- Check the presentation of your child's written work, is their working legible and easy to follow?
- Monitor the completion of homework, for Mathematics this is set weekly.
- Encourage your child to complete any better if statements that their class teacher has written in their exercise books.
- Test your child on their times tables/ mental maths.
- Explain real world maths concepts to your child when possible, eg use of 12 hour and 24 hour clock.
- Use of meters to measure consumption of utilities.
- What does 50% extra free mean?
- Concept of interest on loans and bank accounts.
- Encourage your child to use real world maths concepts.
- What does cash back mean?
- What does mph mean?
- What are the speed limits on different types of roads?
- Working about the measurements of a room if having new flooring fitted.
- Estimating the cost of shopping to ensure you have enough money.
- Work out the amount of change you are expecting from a purchase.
- Understanding a bank statement.
- Work out the discount for items in sales.
- If cooking, how do you know how long to roast a chicken for?
- Work out if the bus or taxi is better value for 1,2,3 people etc when getting to town.

Preparing for Assessments

Help your child to prepare for these assessments by encouraging them to revise on a regular basis, revisiting topics regularly helps develop recall, confidence and understanding:
Revising the topics covered during the half term using any of the following:

Revision guides and workbooks

For Mathematics, the best form of revision is completing questions, as this allows students to develop their understanding whilst improving their recall of key facts and methods. It is also beneficial to work on improving areas of weakness by revisiting them more regularly. For mathematics 10 to 15 minutes' worth of revision daily is better than an hour one day a week.

Finally, but most importantly

If your child does not understand a concept or is really stuck with their homework, please encourage them to ask for help.

They do not have to ask their own maths teacher, but they need to ask, there is always someone in the department who will be happy to help!

Useful websites:

www.v/e.mathswatch.co.uk (Login and password will be provided by class teachers)

http://www.bbc.co.uk/education/subjects/zqhs34j

Staff Contacts:

Miss Marshall	Head of Mathematics
Mrs Jagger	Year 7 and 8 Coordinator

Modern Foreign Languages - French

French			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – October)	Leisure TV / Film / Reading Technology Last weekend		• Help revise vocabulary relating to topics and go over notes on how to form the past tense • Help with doing research into French TV
Autumn 2 (October - December)	Holidays Describing a trip to a city Weather Transport	Speaking and Writing Assessments	• Help with doing research into cities in France (Paris in particular) • Help revise for speaking and writing assessments using handouts given to the pupil
Term 2: Spring 1 (January - February)	Talking about yourself Personality Relationships Music Clothes		• Help with doing research into French music
Spring 2 (February – April)	House & home		• Help revise vocabulary relating to topic
Term 3: Summer 1 (April - May)	Food and drink		• Help with doing research into food and drink in France
Summer 2 (May - July)	Talents Ambitions Personalities	End of year exams	• Help revise for exams by testing vocabulary on handouts given to the pupil (give the French and ask for the English)

Useful Websites:

Linguascope www.linguascope.com
(request username/password from teacher)

Staff Contacts:

Mrs Yates Head of Modern Foreign Languages

Modern Foreign Languages - Spanish

Spanish			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – October)	Describing a past holiday		• Help revise vocabulary relating to topics and go over notes on how to form the past tense
Autumn 2 (October - December)	Leisure activities Music TV Last weekend	Speaking and Writing Assessments	• Help revise for speaking and writing assessments using handouts given to the pupil
Term 2: Spring 1 (January - February)	Food and drink Likes & dislikes Ordering in a restaurant Buying food		• Help with doing research into food and drink in Spain • Practise dialogues
Spring 2 (February – April)	Arranging to go out Excuses Getting ready to go out clothes		• Help revise vocabulary relating to topic
Term 3: Summer 1 (April - May)	Holiday destinations Holiday homes Holiday activities		• Help with doing research into holiday destinations in Spain
Summer 2 (May - July)	Directions	End of year exams	• Help revise for exams by testing vocabulary on handouts given to the pupil (give the Spanish and ask for the English)

Useful Websites:
Linguascope www.linguascope.com
(request username/password from teacher)

SENECA https://senecalearning.com
(request username/password from teacher)

Staff Contacts:

Mrs Yates - Head of Modern Foreign Languages

Music

Music		
List of Topics	**End of term Assessment**	**What can a parent do to support?**
The Blues Students look at the genre and learn how to play and compose stylistically accurate music	Individual and group assessment of performance	• Listen to examples of Blues music. • Encourage practice of keyboard skills if you have a keyboard, or a keyboard app.
Music technology - an introduction. Students compose a remix of a famous song using Logic.	Paired assessment of remix project	• If you have an iPad or a Mac computer, free software is available that students can practice using.
Seven Nation Army – Students learn to play the different parts to this song using four different instruments.	Group composition assessment	• Listen to the song “Seven nation army” and familiarise yourself with it.
Film Music Students put their own music to a film clip using Logic.	Paired composition assessment	• Encourage students to listen critically to the music that accompanies films.

THE ORDER OF THESE SCHEMES MAY VARY TO ACCOMMODATE ROOMING

Staff Contacts:

Mrs T Hammond - Head of Music
Mr L Roberts – Teacher of Music

Physical Education

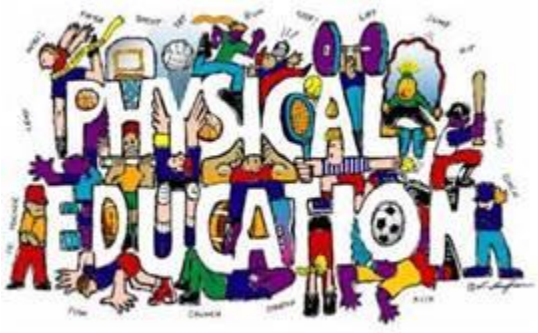
Physical Education			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – October)	Fitness Invasion Games Gymnastic Activities Racquet Sports on a rotation across various activities	Each activity has a series of classroom based theory lessons and an electronic assessment based on the rules and techniques learnt in the practical lessons of each topic. Each student is assessed on their practical ability in each topic.	• Encourage participation in ANY area of physical activity • Be aware of the PE remote working resources on SharePoint • NGB website for each sport will have the basic rules • GCSE Bitesize PE website • TeachPE website
Autumn 2 (October - December)			
Term 2: Spring 1 (January - February)			
Spring 2 (February – April)			
Term 3: Summer 1 (April - May)	Athletics		
Summer 2 (May - July)	Swimming Cricket Rounders Tennis Softball		

Useful Websites:

Peterborough School Sport Partnership
www.yourschoolgames.com

Staff Contacts:

Mr T Neaverson Head of PE
Ms L McPartlin Assistant Head of PE



Religious Education

Religious Education			
When	**List of Topics**	**End of term Assessment**	**What can a parent do to support?**
Term 1: Autumn 1 (September – October)	Hinduism: • Hindu Beliefs • The Hindu Trimurti • Festival of Holi • The Ramayana / Diwali	Key words test Pilgrimage and Festivals Assessment	• Practice spelling key words and ensure they understand their meanings • Ensure students revise using revision sheet • Ask questions about key information on sheet eg why is the River Ganges considered sacred to Hindus? Are there any alternatives? • Encourage students to consider/evaluate opinions contrary their own
Autumn 2 (October - December)	• Hindu Pilgrimage • Hindu Scripture • Karma & Reincarnation • Gandhi's life and achievements	Reincarnation board game Key words assessment	• Talk about the concept of reincarnation • Practice spelling key words ad ensure they understand their meanings • Practice using the key words in a sentence
Term 2: Spring 1 (January - February)	Buddhism • Gotama's birth • Four Sights • Enlightenment • Four Noble Truths	Key words test Buddhism assessment – life of Gotama	• Practice spelling key words and ensure they understand their meanings • Ensure students revise using revision sheet • Ask questions about key information on sheet eg; was Gotama selfish when he left his family to search for the truth? What did he actually achieve? • Encourage students to consider / evaluate opinions contrary to their own
Spring 2 (February – April)	• Five Precepts • Buddhist Worship / Festivals	Key words test Buddhist worship project	• Practice spelling key words and ensure they understand their meanings • Practice using the key words in a sentence • Encourage students to research online about ways in which worship affect the life of a Buddhist and whether all Buddhists worship in the same way?

Term 3: Summer 1 (April - May)	Sikhism: • Life of Guru Nanak • The 10 Gurus • Guru Nanak's teachings	Year 8 key word test	• Practice spelling of key words with students and ensure they understand their meanings
Summer 2 (May - July)	• The 5Ks • The Gurdwara / Langar • Sikh Festivals & Worship	End of Year assessment	• Ensure students revise using revision sheet • Ask questions about key information on sheet eg; is there any evidence for life after death? What would a scientist believe and why? • Encourage students to consider / evaluate opinions contrary to their own

Staff Contacts:

Mrs G Ellis Joint Head of RE
Mr S Ahmed Joint Head of RE

Science

Science			
When	**List of Topics**	**Assessment**	**What can a parent do to support?**
Different groups will do these topics in a different order, but they will all be covered by the end of the year.	**Physics 1** – **Contact Forces and Pressure:** Equilibrium, drag, stretch and compression, Hooke's Law, pressure in solids and fluids, calculating pressure, floating and sinking. **Physics 2 – Magnetism and Electromagnetism:** Forces and fields, electromagnetism, using and investigating electromagnets. **Physics 3 – Work and Heating and Cooling:** Doing work, making work easier, thermal energy, heating, insulators, and temperature. **Physics 4 – Sound and Light:** Waves and energy, sound waves and terminology, ultrasound, how we hear, speed of sound, reflection and absorption of sound, properties of light, reflection and refraction of light, how we see, spectrum of white light and mixing colours of light, **Chemistry 1 – Periodic Table:** Structure of Period Table, metals, non-metals, Group 1 metals, Group 7 non-metals, Group 0 non-metals, **Chemistry 2 – Chemical Energy and Types of Reaction:** Mass changes in chemical reactions, combustion, fuels, thermal decomposition, exothermic and endothermic reactions, catalysts. **Chemistry 3 – Climate and Earth Resources:** Understanding the atmosphere, carbon cycle, global warming and human effects, damaging Earth's resources, recycling.	A short test after each topic. Some formative assessments, in class and as homework. One exam in the Summer Term.	Encourage your child to read any newspaper/ magazine articles on Science. Encourage them to watch any programmes on television about Science. Practice physics formulae with them and make sure they understand how to use them. Practice writing out chemical equations. Purchase a revision guide (Collins KS3 science All-In-One Revision and Practice-ISBN number 978-0-00-756283-1) and encourage your child to use it to reinforce subject knowledge as topics are taught and for revision, practising the questions. Collins AQA KS3 Science student books 1 and 2 ISBN numbers: 978-0-00-821528-6 978-0-00-821529-3

	Biology 1 – Breathing and Digestion: Breathing, measuring breathing, gas exchange, lifestyle and smoking, healthy diet, lifestyle effects of unbalanced diet, digestive system, enzymes. **Biology 2 – Respiration and Photosynthesis:** Aerobic and anaerobic respiration, respiration in sport, fermentation, how plants make food, investigating photosynthesis, structure of leaves, water and mineral movement, importance of minerals for plants. **Biology 3 – Evolution and Inheritance:** Natural selection, importance of biodiversity, extinction, DNA, chromosomes, variation, modelling inheritance,		. Useful websites to support learning and revision: https://www.bbc.com/education/subjects/zng4d2p https://senecalearning.corn/en-GB/ http://www.docbrown.info/ks3science.htm http://www.ntscience.co.uk/powerpoint/index/html http://www.docbrown.info/ks3science.htm http://www.ntscience.co.uk/powerpoint/index.html https://kahoot.com/ Students can sign in to make and access quizzes

Staff Contacts:

Mrs D Debbage Head of Science
Dr L Edwards Key Stage 3 Coordinator



Make the Ordinary come alive

Do not ask your children

to strive for extraordinary lives.

Such striving may seem admirable,

but it is a way of foolishness.

Help them instead to find the wonder

and the marvel of an ordinary life.

Show them the joy of tasting

tomatoes, apples and pears.

Show them how to cry

when pets and people die.

Show them the infinite pleasure

In the touch of a hand,

And make the ordinary come alive for them

The extraordinary will take care of itself.