### **Year 8 Threshold Concepts and Support Guidance**

**Summer Term** 

For the areas of learning within each subject we have identified the key knowledge and skills which students need to secure to give them a firm foundation on which to build further learning. We refer to these as threshold concepts and it is our intention that every student secures these threshold concepts to make outstanding progress through the curriculum.

We believe that the feedback and assessment that pupils receive is specifically related to the individual subject and so each department has a feedback and assessment policy, and teachers use a range of strategies to assess students' progress using the threshold concepts.

Below are the subject threshold concepts for the areas of learning covered during the Summer Term. You can support your child's progress by regularly discussing the threshold concepts with them to recap what they have learnt.

In addition, you can support your child's areas for development that we have signposted using resources and links below.

Here is a link to the Knowledge Organisers for Year 8 Summer Term: (LINK)

### **Blended Learning:**

Please visit each of your child's classes on Microsoft Teams for lesson resources and extended learning opportunities.



	Year 8 Threshold Concepts – Summer term	How to support students' learning
	Unit guiding question: Can I explore poetry from different cultures and the	Reading:
	perspectives/impetus behind this form of writing?	For reading strategy support, please visit The National Literacy Trust:
	TC1 - Understanding texts: identifying explicit and implicit information;	Improve your child's learning at home   Words for Life
	selecting accurate and precise quotations.	You can access a range of poetry here:
English (Literature and Language inc. Reading)		You can access a range of poetry here:  myON®  The following websites are links that students and parents can use to support understanding of the texts:  Reading Poetry  Writing: The following websites are links that students and parents can use to support completion of written work around the poetry studied: Introduction to Poetry Understanding Poetry  Speaking and Listening: Talk about the poems studied at home and what students have learnt today. Watch a range of diverse poetry readings from the BBC here: Culturally Diverse Poetry.

# Maths (Inc Numeracy)

### Angles in parallel lines and polygons

**TC112** - Understand that a pair of parallel lines traversed by a straight line produces sets of equal and supplementary angles

**TC113** - Know and understand proofs that in a triangle, the sum of interior angles is 180 degrees

### Area of trapezia and circles

**TC114** - Understand the concept of perimeter and use it in a range of problem-solving situations

**TC115** - Understand the concept of area and use it in a range of problem-solving situations

### **Line symmetry and reflection**

TC116 - Understand and use reflections

**TC117** - Understand the minimum information required to describe a reflection (line of reflection)

### The data handling cycle

C118 - Use the different measures of averages and spread to compare two sets of data

**TC119** - Interpret reasonably statistical measures and representations

TC120 - Choose appropriately statistical measures and representations

### Measure and location

**TC121** - Understand what the mean is measuring, how it is measuring it and calculate the mean from data presented in a range of different ways

**TC122** - Understand what the mode is measuring, how it is measuring it and identify the mode from data presented in a range of different ways

**TC123** - Understand what the range is measuring, how it is measuring it and identify the range from data presented in a range of different ways

- Each of the units to the left have knowledge organisers to support your child in understanding the unit. These can be found by clicking the link on the front page which will take you to the school website.
- If your child is struggling with a particular skill encourage them to use the support materials or contact their teacher to resolve the issue.
- Sparx Maths can be used to support home learning. The system will send a weekly homework update. Please encourage your child to complete the homework to the best of their ability. The homework is a recap of the skills they have been taught.

### **Biology**

### Bioenergetics

**TC14(B)** - Understand that respiration and photosynthesis are chemical processes that provide plants and animals with energy.

### **Biology**

### 4. Knowledge Organisers

### **Bioenergetics**

- Photosynthetic Reaction (4.1.1) | AQA GCSE Biology Revision Notes 2018 | Save My Exams
- Rate of Photosynthesis (4.1.2) | AQA GCSE Biology Revision Notes 2018 | Save My Exams
- Required Practical: Photosynthesis Rate (4.1.4) | AQA GCSE Biology Revision Notes 2018 | Save My Exams
- Aerobic & Anaerobic Respiration (4.2.1) | AQA GCSE Biology Revision Notes 2018 | Save My Exams
- The whole AQA BIOENERGETICS. 9-1 GCSE Biology or combined science for paper 1 YouTube

Each of the topics taught in science have relevant knowledge organisers available to support and guide pupils. These can b found on the school website, in their science books and in the student resources science folder.

Microsoft teams is used to upload the lessons frequently, as well as additional learning resources for pupils to access. If there is a particular lesson/topic area that needs additional practice, they can use these resources to support them. Alternatively speaking to their class teacher will allow for additional help and resources too.

Educake can also be used as an additional tool to help with revision and recall. Logins can be found on Microsoft teams in the general science channel, as well as on pupil's science books. There is the opportunity to complete pre-set quizzes set by teachers, but also to select their own desired revision areas for additional practice.

### **Physics**

### **E**M Spectrum

**TC17(P)** - Understand that Electromagnetic waves are waves in different frequencies

### **Physics**

### 4. Knowledge Organisers

### **EM Spectrum**

- https://www.bbc.co.uk/bitesize/topics/zw982hv/articles/zg26nk7
- <a href="https://studyrocket.co.uk/revision/gcse-physics-aqa/waves/electromagnetic-spectrum">https://studyrocket.co.uk/revision/gcse-physics-aqa/waves/electromagnetic-spectrum</a>
- https://www.savemyexams.co.uk/gcse/physics/aqa/18/revisionnotes/6-waves/6-2-electromagnetic-waves/6-2-1-electromagnetic-emwaves/

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### Chemistry

Bonding part 2

**TC16(C)** - Understand that there are 3 types of bonding (Ionic, Covalent and Metallic) and their properties.

### Chemistry

4. Knowledge Organisers

### **Bonding and Structure**

- Ionic Bonding (2.1.2) | AQA GCSE Chemistry Revision Notes 2018 | Save My Exams
- Covalent bonding (2.1.4) | AQA GCSE Chemistry Revision Notes
   2018 | Save My Exams
- Metallic Bonding (2.1.5) | AQA GCSE Chemistry Revision Notes 2018 | Save My Exams
- Bonding, structure and the properties of matter GCSE Combined Science Revision AQA Trilogy BBC Bitesize
- The Whole of AQA BONDING, STRUCTURE AND PROPERTIES. GCSE Chemistry or Combined Science Revision. YouTube

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### **RSE**

### Respectful relationships, including friendships;

**TC8** Know the characteristics of positive and healthy friendships (in all contexts, including online) including: trust, respect, honesty, kindness, generosity, boundaries, privacy, consent and the management of conflict, reconciliation and ending relationships. This includes different (non-sexual) types of relationship.

**TC9** Know practical steps they can take in a range of different contexts to improve or support respectful relationships.

**TC10** Know how stereotypes, in particular stereotypes based on sex, gender, race, religion, sexual orientation or disability, can cause damage (e.g. how they might normalise non-consensual behaviour or encourage prejudice).

**TC11** Know that in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including people in positions of authority and due tolerance of other people's beliefs.

**TC12** Know about different types of bullying (including cyberbullying), the impact of bullying, responsibilities of bystanders to report bullying and how and where to get help.

**TC15** Know the legal rights and responsibilities regarding equality (particularly with reference to the protected characteristics as defined in the Equality Act 2010) and that everyone is unique and equal.

### **Being Safe**

**TC24** Know the concepts of, and laws relating to, sexual consent, sexual exploitation, abuse, grooming, coercion, harassment, rape, domestic abuse, forced marriage, honour-based violence and FGM, and how these can affect current and future relationships.

**TC26** Know how to recognise the characteristics and positive aspects of healthy one-to-one intimate relationships, which include mutual respect, consent, loyalty, trust, shared interests and outlook, sex and friendship.



A collection of resources from the NSPCC on relationships and discussions to have with children

### **NSPCC – Talk Realtionships**



A collection of resources from Childline covering relationships and consent.

Healthy and unhealthy relationships | Childline



Sexual relationships and consent

## **Architecture TC28** - Understand the main components of an artist research page. TC29 - Knowledge and understanding of Antoni Gaudi. Art

TC30 - Knowledge and understanding of Cubism.

TC31 - Understand how collage, using photos, can be used to inform a final art outcome.

### **Architecture**

Research and investigation should be undertaken by students to widen their knowledge and understanding of artists, art movements, and also the different materials and processes that are used in the creation of different artworks.

When we research an artist we need to understand them and their work. For an effective artist research page we need to produce a background and title that links to the artists' style. The page should also include interesting facts and images. An analysis of the work is also very beneficial and you should consider the following:

Mood (Feelings and Emotions),

Content (What is it?),

Form (Line, Tone, Colour, Pattern, Texture, Shape, Form),

Context (Why it was produced?)

Process (How it was produced?



Antoni Gaudi



Cubism

Talk about how photographs can be cut and arranged to produce a new composition. Their own photographs can be used to create a more individual and personal outcome.

### Architecture

Talk about how photographs can be cut and arranged to produce a new composition. Their own photographs can also be used to create a more individual and personal outcome.

Research and investigation should be undertaken by students to widen their knowledge and understanding of artists, art movements and different materials and processes that are used in the creation of

<u>Architecture</u>	different artworks. Talk about using different search engines, like Google
TC31 - Understand how collage, using photos, can be used to inform a	and Bing etc.
final outcome.	The internet is not the only way to gain source material as direct
	observational drawings, photographs, images etc are also very effective
	ways to develop ideas for artwork.
TC32 - Understand that the internet should not always be used as source	
material.	Research the many styles that we see in architecture, including Antoni
	Gaudi, Cubism, Art Deco, Bauhaus, Arts and Crafts Movement, and
	modern design too.
	Look at different types of art and find out which materials and processes
	were used to produce the art.
	Talk about art at home and what students have learnt at school past and
TC33 - Understand that artist's work of past and present can be used to	present.
influence a final outcome.	Talk about art that is in the news.
	Talk about careers in art.

**TC23** - Understand that art can be created using mixed media.

### Computing

### **Developing for the web**

**TC1** - Digital Literacy - To find, evaluate and communicate using a range of digital mediums.

**TC2** - Data Representation - To understand that binary logic is the central concept in representing, processing and storing data.

### **Introduction to Python Programming**

**TC3** - Computational Thinking - To understand how to efficiently and effectively solve a problem using abstraction, decomposition, pattern recognition and algorithmic thinking.

**TC4** - Constructs - Understanding how to use Sequencing, Selection and Iteration to create algorithms.

**TC5** - Computer Systems - To recognise and understand the key hardware and software involved in simple and complex computer systems.

### **Developing for the web**

- www.w3schools.com/html
- www.w3schools.com/css
- www.w3schools.com/cssref

Links above can be accessed on PC, laptop, mobile phone, or tablet

Please visit your child's computing class on Microsoft Teams which gives specific details about the different threshold concepts.

### **Introduction to Python Programming**

- repl.it
- pythontutor.com/visualize.html
- trinket.io
- projects.raspberrypi.org
- Docs.python.org/3

Links above can be accessed on PC, laptop, mobile phone, or tablet

<u>Unit guiding question:</u> What is the relationship between food, the body and the world around us?

**TC3(F)** - The food choices that we make have an effect on our bodies and health and the world around us



To better understand that food and drinks provide different nutrients in varying amounts, and that all nutrients have important functions in the body



Use this website to better understand where our food comes from



To better understand how the impact of our food choices on the environment, look for the origin labels on your favourite fruit and vegetables and use this website to work out how far it has travelled.



This website also explains the environmental impact of foods and their ingredients



Adapt and follow recipes from this website, to develop food skills and cooking techniques when making a healthy meal or snack at home.

To better understand how to use food labelling to make informed food choices, use everyday experiences as learning opportunities. This might include looking at the nutritional labels on your favourite snacks. Use this website for easy ways to make a swap

### **Systems and Control**

**Unit guiding question**: What is the purpose of a mechanism?

The threshold concept that is truly essential to enable pupils to access future learning is ...

TC4 (S) - Mechanisms convert one type of motion into another.

**TC5 (S)** - Understand different types of motion and what mechanisms are used to convert them from one to another.

**TC6 (S)** - Understanding that there are inputs processes and outputs for every mechanical system.



Visit BBC bitesize to revise or study more about movement and mechanisms.

### **Resistant Materials**

**Unit guiding question**: How is metal used to make products.

**TC1 (R)** - Understand that a metal is either Ferrous or Non- Ferrous and each can be used to create a wide variety of products.

**TC2 (R)** - Understand the environmental impact of using metals and the importance of recycling.

TC 3 (R) - Understand that correct size and proportion help make designs look realistic.

**TC 4 (R)** - Understand the benefits of using templates and jigs in the production of practical work.

TC 5 (R) — Understand that metal can be shaped and joined to allow us to manufacture complex objects.

### **Resistant Materials**

Study more about materials and working with metal by following the links below:



	Health and Social Care	Health and Social Care
	nealth and Social Care	Health and Social Care
	TC1(H) – Understand how peoples physical, intellectual, emotional and social well-being are linked	Unit-1-Revision-Guide1.pdf (haberdashersabrahamdarby.co.uk)  Healthy diet - Nutrition, digestion and excretion - KS3 Biology -
	TC2(H) – Understand what influences our health and well-being	BBC Bitesize - BBC Bitesize
	TC3(H) - Understand the impact of healthy eating on our growth and development	Unit 1: Human lifespan development - Life stages & P.I.E.S (Health
	TC4(H) – Understand the impact of nurture on our growth and development	& social care BTEC Level 3)
	TC5(H) - Understand the impact of life events and how we can manage them	
	Kenya and Extreme Weather	Use the relevant Knowledge Organisers for revision.
Geography	TC1 - Understands how to use and interpret a range of data, sources of geographical information and terminology, including maps, graphs, and photographs.  TC4 - Understand processes (physical and human) are key to explain what the Earth is like and why it is changing.  TC8 - Recognises and understands that there are numerous natural and human patterns found on Earth that are not random.	<ul> <li>Check out the following BBC Links:</li> <li>Geographical Skills: <a href="https://www.bbc.co.uk/bitesize/topics/zm38q6f">https://www.bbc.co.uk/bitesize/topics/zm38q6f</a></li> <li>BBC Earth: <a href="https://www.bbc.co.uk/programmes/p0114nj6">https://www.bbc.co.uk/programmes/p0114nj6</a></li> <li>The Geography of Africa: <a href="https://www.bbc.co.uk/bitesize/topics/zsw4kty/articles/z2k6p4j">https://www.bbc.co.uk/bitesize/topics/zsw4kty/articles/z2k6p4j</a></li> <li>Development in Kenya: <a href="https://www.bbc.co.uk/bitesize/guides/z3y2k2p/revision/4">https://www.bbc.co.uk/bitesize/guides/z3y2k2p/revision/4</a></li> <li>Extreme Weather in the UK:</li> </ul>
	<b>TC7</b> - Recognises and understands that sustainability is a key strategy in a range of geographical areas.	<ul> <li>https://www.bbc.co.uk/bitesize/topics/zx38q6f/articles/zwwfn9q</li> <li>Weather and Climate in the UK:</li> <li>https://www.bbc.co.uk/bitesize/guides/zq2qg82/revision/5</li> </ul>
	TC5 - Recognise and understand that the Earth is constantly changing	

### History

### Why did World War Two happen?

**TC23** - Germany changed from a monarchy to a republic and ended as a dictatorship between 1918 and 1939.

**TC24** - It is important to use historical perspective when analysing the significance of different groups and events.

### **World War Two**

**TC25** - World War Two was a global war because of the countries involved as well as the involvement of soldiers and civilians.

**TC26** - Which events are seen as significant can change based on who is looking back at them and their own personal interpretations based on a number of factors such as their own heritage.

BBC Bitesize offers a range of knowledge development and knowledge checking activities.

Inter War https://www.bbc.co.uk/bitesize/topics/z94cwmn

World War Two - https://www.bbc.co.uk/bitesize/topics/zk94jxs

- Use Microsoft Teams to access power points and information from lessons to use to revisit information that you aren't sure about to help you develop your knowledge and skills.
- Participate in the History around you. Shropshire is a history rich area with links directly to World War Two (Hitler wanted to use Bridgnorth as his capital in England if he took over the British Isles. We also have lots of cenotaphs to visit to remember local fallen soldiers and we are not far from the National Memorial Arboretum which is rich in knowledge about various wars including World War Two.)

### A Trip to Paris

**TC16H** - In French the past participle of regular verbs is formed in three ways, depending on the type of infinitive -er, -ir, or -re.

**TC17H** - Certain verbs use "être" as their auxiliary verb to form the perfect tense. These verbs can be memorised using the acronym MRSVANDERTRAMP. The past participle of these verbs must agree with the subject of the verb.

**TC18L** - There is no past progressive or simple past tense in French. The perfect tense is used to refer to completed past events. To form past participles of regular -er infinitives, the -er is replaced with the suffix -é.

To be an independent language learner and to practise and revise the work done on the topic of **A Trip to Paris** you should:

- Use the knowledge organisers to revise and practise the essential vocabulary.
- Use class material on Class Teams to revise work covered in lessons.
- Use <u>www.memrise.com</u>, <u>www.linguascope.com</u>
   (Username: LangleyMFL, Password: Frenchmfl2) and <u>www.languagesonline.org.uk</u> to practise vocabulary and pronunciation.

This QR code will help you to practise the perfect tense with avoir:



These QR codes will help you to practise the perfect tense with etre:





Drama

**Unit guiding question:** What are the features of a script? What is verbatim? How is it used?

### Performing

### Characterisation

**TC7** - Creating a believable character and applying performance skills

### **Performance Skills**

**TC4** - Knowledge of performance skills (body language, facial expressions, voice, awareness of the audience) and knowing how to apply them

### **Production Skills**

TC9 - Understanding of how a play gets staged

### Creating

### Collaboration and Communication

**TC10** - Working effectively as part of a group, sharing ideas

### **Creative Intentions**

 $\ensuremath{\mathbf{TC12}}$  - Awareness of storyline they are creating and what they want to achieve. Knowledge of the genre

### **Devising Skills**

**TC13** - Creating short performances to a brief

### Responding

### Interpretation of texts/Stimuli

TC16 - Effectively responding to a script

### **Evaluation Skills**

**TC17** - Evaluating and improving own work and when evaluating the work of others suggesting areas for improvement.

- Encourage your child to attend extra-curricular activities. There are Clubs on every night in the Performing Arts Department and opportunities to perform at events and concerts.
- Watch theatre productions. Local Theatres <u>Theatre Severn</u>, <u>The Place</u>
   Telford
- We are also a subscriber of the National Theatre Collection.

<u>Login:</u> <u>https://www.dramaonlinelibrary.com/custom-</u>

 KS3/KS4 BBC Bitesize - A website designed to help learn about topics covered at KS3 and KS4, support learning and find out about careers in music KS3 Drama - BBC Teach, Drama - BBC Bitesize, Drama - BBC Bitesize **Unit guiding question:** What is an ensemble in music? How can I work effectively as part of an ensemble?

### **Performing**

### Singing

TC2 - Singing rhythms and melodies accurately and fluently

### Playing (Instrumental)

TC6 - Playing rhythms and melodies accurately and fluently

### Creating

### Composing

TC13 - Composing using a 12-bar blues structure

### **Improvising**

TC10 - Improvising musical responses to a given structure/brief

### Responding

### Listening and Appraising

**TC21** - Identifying the instruments, timbres and sonorities used in different musical ensembles

### Critical Engagement

**TC27** - Evaluating own work and work of others making improvements where necessary

- Try to expose your child to as wide a variety of music as you can.
   Attend music concerts of all types and introduce your child to choirs and orchestras.
- Ask your child to listen to the music played while you are out in shops, restaurants and other public places.
   Do they notice any differences between the types of music played in different places?
- All students in KS3 learn to sing and play a range of instruments in class, but many pupils wish to extend their musical experience through in-depth study of a particular instrument or the voice by taking Instrumental / Vocal Lessons. If your child is interested in learning an instrument/singing please see Mrs Williams for a letter.
- Undertaking extra-curricular activities has far-ranging benefits including learning new skills, boosting academic performance, developing broader social skills and improving time management. There are Clubs on every night in the Performing Arts Department and opportunities to perform at events and concerts.
- Bandlab for Education An award winning online music platform where students can embark on a music-learning journey that unleashes their creativity and foster collaboration with peers: <a href="https://edu.bandlab.com/">https://edu.bandlab.com/</a>
- BBC 10 Pieces BBC Ten Pieces consists of ten performances of classical music which aim to open up the world of classical music to 7-14 year-olds across the UK and inspire them to develop their own creative responses to the music: <a href="https://www.bbc.co.uk/teach/ten-pieces/all-resources/zdg3t39">https://www.bbc.co.uk/teach/ten-pieces/all-resources/zdg3t39</a>
- KS3 Music Bitesize A website designed to help learn about topics covered at KS3, support learning and find out about careers in music: https://www.bbc.co.uk/bitesize/subjects/zmsvr82
- Little Kids Rock Jam Zone Learn to play your favourite band skills instruments and songs: <a href="https://jamzone.littlekidsrock.org/">https://jamzone.littlekidsrock.org/</a>
- Telford and Wrekin Music Service is our local music service hub. They offer
  a wide range of ensembles that you can join as well as offering
  instrumental hire and invaluable experience for young people with high
  musical aspirations: <u>Telford & Wrekin Music</u> (telfordandwrekinmusic.co.uk)
- Music Theory Free online lessons and exercises to help learn about the theory behind music: https://www.musictheory.net/

	Summer:	Knowledge organisers are available to help your child with their work.
PE	TC19 - Recognise key rules and consequences in a sport.  TC20 - Describe strengths and areas for improvement of a performance for yourself and others.  TC23 - Be respectful and positive to staff and other students.  TC24 - Be self-motivated and inspire others to participate.  TC26 - Is consistently hardworking, resilient, helpful and eagerly accepts challenge.  TC27 - Can effectively express emotions.	<ul> <li>KO's and work will be uploaded onto teams when necessary for home access.</li> <li>Here are some links that will help with home learning, especially around the rules and regulations of the summer sports we will be completing:         https://www.theukrules.co.uk/rules/sport/rounders/top-ten-regulations.html         https://www.rulesofsport.com/sports/tennis.html         https://www.rulesofsport.com/sports/athletics.html         www.cricket-rules.com     </li> </ul>
PSHE	Summer  TC17 – PSHE: Understand that there are skills and attributes that employers value.  TC18 – PHSE: Understand that there are a range of opportunities available for career progression, including in education, training and employment.	Careers and employability skills information can be found on the school website.  BBC -Keystage 3 and 4 careers advice  Employability skills - Barclays

# **Religious Studies**

### Unit - Sikhism

- **TC6** To understand the influence key beliefs, teachings and practices have on religious believers, and at times non-religious believers, today (individuals, society and community)
- **TC1** To understand that religious beliefs are interpreted differently, even with in the same religion or denomination
- **TC8** To understand the symbolisms found within religion
- **TC3** To understand that misconceptions exist surrounding religious beliefs and practices that need addressing
- **TC2** To understand that religious practices have varying levels of adoption

- There are knowledge organisers to support your child in understanding units. These can be found by clicking the link on the front page which will take you to the school website.
- Resources on your child's class Microsoft Teams can support with their understanding.
- Sikhism KS3 Religious Studies BBC Bitesize
- <u>Religious Studies KS2: What is Sikhism? BBC Teach</u> Scroll down for other videos