



Year 10

Super

Curriculum

THE SAMUEL WHITBREAD ACADEMY SUPER CURRICULUM

The super curriculum at Samuel Whitbread is designed to give you something extra outside of the learning you do in the classroom to:

- build your independence as a curious thinker,
- fire your passion for your favourite subjects,
- and broaden your knowledge of the wider world.

In this booklet, you will find a range of challenges for each subject for you to complete in your own time. They can be done in any order you like.

There are three challenges per subject divided into three levels of difficulty and effort: Bronze, Silver and Gold.

As you complete the challenges, you'll be given reward points, and if you complete all the Gold challenges in any subject, you will be put forward to join our HA programme. Just show your teacher (or Miss Corbishley) evidence of what you've done! You can email swa-supercurricular@bestacademies.org.uk

So whether you are developing an art sketchbook, learning to play a musical instrument, vying to be captain of a sports team, or developing code breaking skills, I hope these challenges will inspire you to think about your own development as a learner.

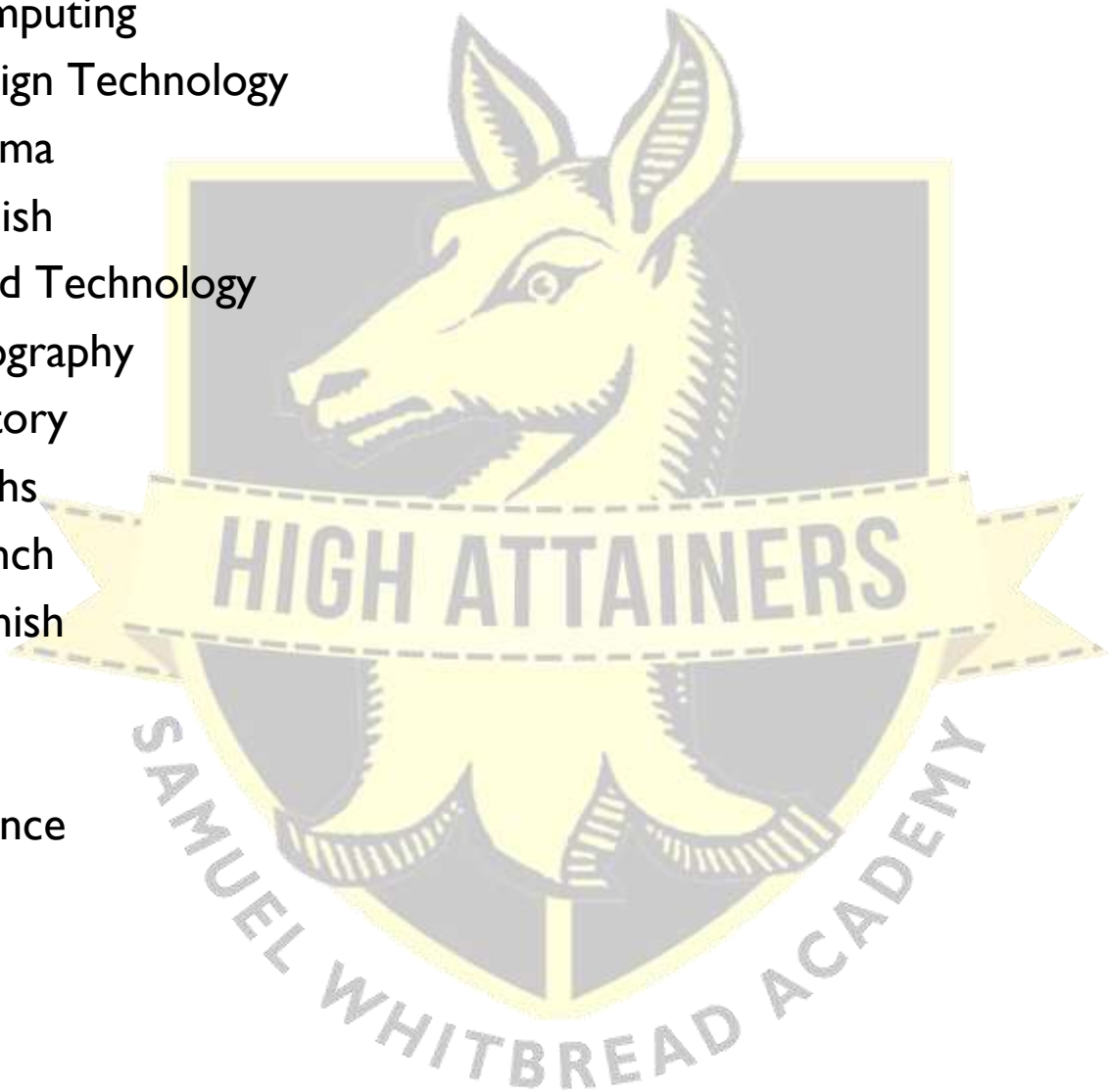
Please do discuss these challenges with your friends and family – there are no rules saying you have to complete them on your own.

I hope you find these enjoyable, and wish you luck!

Yours, the HA team.

CONTENTS

Art	4
Business	5
Computing	6
Design Technology	7
Drama	8
English	9
Food Technology	10
Geography	11
History	12
Maths	13
French	14
Spanish	15
PE	16
PRE	17
Science	18



ART

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	<p>Practise using the formal elements of Art. Get involved with 'The Big Draw'.</p> <p>The Big Draw - The world's largest drawing festival - 30 Day Drawing Challenge</p>	<p>Visit any of the Tate Galleries including: Tate Britain, Tate Modern, Tate Liverpool or Tate St Ives:</p> <p>Tate Modern Tate Britain Tate Liverpool</p>	<p>Fill a concertina sketchbook with records of all your Art based visits documenting the journey across many pages through drawing, photography and mixed media.</p>
C H A L L E N G E 2	<p>Explore 10 Textile Artists and their techniques:</p> <p>Discover: Five contemporary embroidery artists - TextileArtist.org</p>	<p>Visit one of the annual Knit, stitch shows, and complete one of the free workshops on offer:</p> <p>The Knitting & Stitching Show</p>	<p>Visit the Natural History Museum at Tring and have a look at the collection of animals and insects in cases. Take a small sketchbook and make sketches as you go around.</p> <p>Tring Natural History Museum</p>
C H A L L E N G E 3	<p>Research the development of Graphic Design over the last 50 Years:</p> <p>Graphics RCA: Fifty Years Traces a Baseline in Graphic Design Education at the RCA</p>	<p>Try out some advanced techniques using Photoshop:</p> <p>Photoshop Tutorials, Freebies, and Photo Editing Resources - FilterGrade</p>	<p>Visit the New Designers Exhibition- an annual showcase of new Art and Design Graduate talent:</p> <p>New Designers</p>

BUSINESS

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Watch an episode of The Apprentice and identify the entrepreneurial skills, qualities and motives that the candidates display, and that Lord Sugar states that he wants to see.	Give a presentation about the life of an entrepreneur that you admire, focusing on how the entrepreneur became successful.	Conduct an interview with a small business owner about their entrepreneurial motives and how they came up with their business idea.
C H A L L E N G E 2	Create a storyboard that shows the stages that a market researcher has to go through when creating and conducting a questionnaire.	Conduct a piece of primary market research for a topic of your choice, ensuring that you ask questions that will provide you with both qualitative and quantitative data.	Conduct a piece of market research for a topic of your choice, then use Microsoft Excel to help you to analyse your results. Put your findings into a PowerPoint presentation or report and hand it to your teacher.
C H A L L E N G E 3	Find an article about a business that has struggled financially. Think about ways that the business could have improved their cash flow to minimise their financial difficulties.	'Businesses should make every effort to make sure that they are meeting each of the four customer needs in order to be successful'. Evaluate this statement, creating an argument for and against.	Write your own case study about a business of your choice. Your case study should focus on what the business' stakeholders are, and how the business acts to make sure that they are meeting all of their stakeholders' interests.

COMPUTING

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Visit the National Museum of Computing in Milton Keynes to see the impact that computers have made for us over the years.	Have a go yourself at beating a computer opponent at chess: https://www.chess.com/play/computer	See how we have used computers to solve mathematical problems: The Four Colour Map Theorem The Four Color Map Theorem - Numberphile
C H A L L E N G E 2	Create a wire frame for a website on a topic or company that interests you. You can be as creative as you like. You might even do it for a family member or friend of the family and get their feedback.	Computer Science Fundamentals - A collection of interactive quizzes that will help you master computer science fundamentals. Courses Brilliant	Research The Internet of Things: Probably the most pervasive trend is the Web of Things, where just about everything we interact with becomes a computable entity. Research how future developments in this area may change or revolutionise our lives even further.
C H A L L E N G E 3	Python - Develop your Python programming skills by challenging yourself to complete as many tasks on Snakify as you can. Snakify	Try to set up Python to perform some basic maths calculations to match some topics you have been using in mathematics, does Python use BIBMAS?	Intelligent Machines – Write a short essay debating the following question – Are computers more intelligent than the people who make them?

DESIGN TECHNOLOGY

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Identify a STEM employer in your local area.	Visit the Natural History museum. Natural History Museum	Visit the Design museum, write an essay on an exhibit that you find interesting. Design Museum
C H A L L E N G E 2	Take a trip to London during the Design Festival.	Visit the Science museum; find an interactive exhibition that uses new technology. Science Museum	Listen to two TED talks on emerging technologies: TED Talks
C H A L L E N G E 3	Listen to a STEM talk podcast: STEM-Talk - IHMC's podcast	Choose a fusion 360 tutorial by Lars Christiansen and work through the project.	Look into upcycling, pick a project and have a go at it.

DRAMA

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Read a Brecht play and a Greek play and make note of the similarities and differences between them.	Record yourself giving a presentation about Greek theatre and the playwrights of the time for your teacher to watch.	Learn a Greek monologue or a monologue from a Brechtian play and present it to your peers.
C H A L L E N G E 2	Watch one Alan Bennett's Talking head monologues and make a note of all the theatrical devices used by the actor and director.	Find a comic monologue; prepare it for performance.	Audition and take part in a school production.
C H A L L E N G E 3	Keep a scrapbook of ideas, stimuli and interesting articles pictures etc that could be used for the start of a piece of drama.	Research and create a display on a theatre practitioner of your choice- make sure your display is bright, eye-catching and full of educational material.	Submit a script to the Script Writing Competition

ENGLISH

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	<p>Three years after 'An Inspector Calls' was first performed, 'Death of a Salesman' was performed in New York, USA.</p> <p>Read an online copy of the play or watch a performance on YouTube.</p> <p>Make a Venn diagrams of similarities and differences.</p>	<p>Read 'Tragedy and the Common Man' by Arthur Miller.</p> <p>He gives his views about what should make a modern tragedy.</p> <p>Read this and make relevant bullet point notes.</p>	<p>Write an essay or presentation to answer the following:</p> <p>Compare the way that Miller and Priestley present the everyday man or woman.</p>
C H A L L E N G E 2	<p>Read 'The Farmer's Bride from the 'Love and Relationships' collection (found online) and analyse it as an unseen poem.</p>	<p>Watch and make notes on this video about the poem:</p> <p>Lord Byron: 'When We Two Parted' Mr Bruff Analysis</p>	<p>Find one more poem from the 'Love and Relationships' collection and make a poster to summarise the differences.</p>
C H A L L E N G E 3	<p>Find two examples of successful pitches on 'Dragons Den'.</p>	<p>Make a list of the verbal and non-verbal techniques that you can use in a persuasive speech.</p>	<p>Write a persuasive speech to make this argument:</p> <p>The best poem in the 'Power and Conflict' anthology is [...]</p>

FOOD TECHNOLOGY

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Research current food trends by using Good Food magazines or the internet.	Visit Borough Market and Harrods to see the latest trends.	Create a product using the latest trends.
C H A L L E N G E 2	Practise KS3 and KS4 practical skills e.g., enriched pastry or dough, separating egg whites for meringue making.	Make a dish incorporating KS3 and KS4 skills.	Create a product incorporating KS 3 skills, KS4 skills and a latest food trend.
C H A L L E N G E 3	Buy a broadsheet newspaper and read current articles on food, e.g. sourcing, dietary needs, nutrition.	Make notes on the articles.	See your Food Tech teacher and explain what you have learnt.

GEOGRAPHY

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Produce a summary poster comparing three different countries (one each for AC, EDC, LIDC). Compare them using development indicators.	Write a diary entry which focuses on the perspective of a migrant in a developing country and why they have chosen to leave the rural areas (push factors) to move to the urban areas (pull factors)	Create your own model of a slum. Add annotations / features which explain the opportunities and challenges of living there. This could incorporate specific examples from around the world.
C H A L L E N G E 2	Produce a summary poster about the different types of plate boundaries and incorporate a specific fact file for at least one. For example, the Mid-Atlantic Ridge which runs through Iceland.	Write a diary entry from the perspective of a Haitian in the aftermath of the 2010 earthquake. Think about their experiences during, and after, the earthquake. Give specific impacts and responses that they experienced.	Create your own volcano (choose from shield / composite). Find a real-life example that you can produce a fact-file about and make your model as realistic to the real one as possible.
C H A L L E N G E 3	Produce a summary poster about the changing preferences of food in the UK - what is the most common takeaway? Why is fish and chips no longer the UK's favourite dish?	Write a diary entry from the perspective of a tourist who has visited different parts of the UK - focus on describing the different physical and human landscapes in the UK.	Create your own coastal / river feature e.g. waterfall. Annotate it to explain the different processes that take place. This could be in the form of a stop-motion video such as this one which explains the formation of a waterfall using Lego. Year 10 - Waterfall and Gorge Formation

HISTORY

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Read a piece of historical fiction relating to a topic we have studied e.g. 'The Book Thief'.	Practise writing exam style answer using the practise questions and guidance on the VLE revision page.	Read a biography or autobiography of a historical figure we have studied as part of your GCSE.
C H A L L E N G E 2	Listen to Dan Snow's "History Hit" podcast: History Podcasts There are hundreds to choose from!	Create a detailed timeline for each historical period we have studied including a minimum of 25 events.	Write a "how to guide" for one type of exam question showing how to write the perfect answer.
C H A L L E N G E 3	Watch the film "Hitler: The Rise of Evil" – available on YouTube at: Hitler The Rise of Evil Pt 1- Robert Carlyle, Live Schreiber, Julianna Margulies & Peter O'Toole.	Design a revision resource for a key topic we have studied and share it with the rest of your class.	Create a poster advertising the benefits of GCSE History to future students. Highlight the skills they will learn and how this may help them in later life.

MATHS

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Visit the National Museum of Computing in Milton Keynes to see the impact that computers have made for us over the years.	Have a go yourself at beating a computer opponent at chess: Play Chess Online Against the Computer	See how we have used computers to solve mathematical problems: The Four Colour Map Theorem The Four Color Map Theorem - Numberphile
C H A L L E N G E 2	Use www.onmaths.com to look at some of the GCSE topics and attempt some of the online topic tests to see how you get on.	Create a revision video suitable for Key Stage 3 students on a topic of your choice. This can be passed on to your teacher if you're feeling brave.	London Maths Trail created by Chris Olley at Kings College London www.themathszone.com/
C H A L L E N G E 3	Start to look at algebraic proofs, video 365 and 366 at Corbett Maths: Videos and Worksheets – Corbettmaths	Try some simple proofs of your own: What are some simple maths proofs for kids? - Quora	Attend the Maths Club

FRENCH

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Change the settings on your Netflix account (More, Account, My Profile, Language) to include French and watch some of your favourite shows in French.	Research a famous French singer or band and make a PowerPoint presentation for the class.	Write a diary about a real or imagined trip to a French-speaking country and include pictures.
C H A L L E N G E 2	Online stories with audio to listen as well: childtopia - YouTube	Plan a long weekend in Paris. What would you visit and why?	Searchable MP3 clips by topic, level and language: Audio Lingua
C H A L L E N G E 3	Read a news article from: I Jour Actu Pick out some new vocabulary and see if you can identify any grammar points you have learnt about in class.	and access the French vocabulary list 'AQA 2016 onwards GCSE French vocabulary'	Research the geography and the political makeup of France. What are the departments? What are the different political parties?

SPANISH

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	Change the settings on your Netflix account (More, Account, My Profile, Language) to include Spanish and watch some of your favourite shows in Spanish.	Research a famous Spanish/ Latin American singer or band and make a PowerPoint presentation for the class. Try, Shakira, Enrique Iglesias, Alejandro Sanz, Gloria Estefan	Write a diary about a real or imagined trip to a Spanish-speaking country and include pictures
C H A L L E N G E 2	Read some online stories with audio to listen as well: childtopia - YouTube	Plan a long weekend in Madrid or Barcelona. What would you visit and why?	Searchable MP3 clips by topic, level and language: Audio Lingua
C H A L L E N G E 3	Read an article from: EL PAÍS Pick out some new vocabulary and see if you can identify any grammar points you have learnt about in class.	Register at www.memrise.com and access the Spanish vocabulary list 'AQA 2016 onwards GCSE Spanish vocabulary'	Research the geography and the political makeup of Spain. What are the provinces? What are the different political parties?

PE

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	<p>Read books on sport including:</p> <ul style="list-style-type: none"> • The Sports Gene by David Epstein 2013 • Bounce by Matthew Syed 2011 • The Talent Code by Daniel Coyle 2009 	<p>Write an article for the school's social media on a book that you have read.</p>	<p>Watch BBC One Panorama – Catch me if you can</p>
C H A L L E N G E 2	<p>Visit Wimbledon Lawn Tennis Club museum or championships, Hatfield House/Hampton Court Real Tennis Courts.</p>	<p>Create a timeline of the development of tennis over the years.</p>	<p>Represent the school in any sport including House Sports. Challenge yourself to represent the County.</p>
C H A L L E N G E 3	<p>Create a scrapbook of any sports person or sporting event from broadsheet newspapers.</p>	<p>Write a coaching plan for any sport.</p>	<p>Lead an activity during Sport Relief week / Children in Need or Comic relief.</p>

PRE

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	<p>War and conflict: Listen to the following Ted Talk What I saw in the war by Janine di Giovanni:</p> <p>Janine di Giovanni: What I saw in the war</p>	<p>Christianity: Watch 'A.J. Jacobs: My year of living biblically'</p> <p>My year of living biblically A.J. Jacobs</p> <p>Present the key ideas in a storyboard or mind-map</p>	<p>Islam: Read the BBC Bitesize page on Good and Evil</p> <p>What is meant by good, evil and suffering? - Good, evil and suffering - GCSE Religious Studies Revision - WJEC - BBC Bitesize</p>
C H A L L E N G E 2	<p>Euthanasia: Watch the Ted Talk, Beyond Life: Managing Your Right to Die by Dr. Allan Saxe</p> <p>Beyond Life: Managing Your Right to Die Dr. Allan Saxe TEDxPlano</p>	<p>Christianity: Online research – Look at the information on Why didn't Christianity die out in the 1st Century?</p> <p>Why didn't Christianity die out in the 1st Century? - BBC Teach</p>	<p>Islam: Online research – Look at the information on the Angels. Make your own notes on this.</p> <p>Angels - Key beliefs in Islam - GCSE Religious Studies Revision - AQA - BBC Bitesize</p>
C H A L L E N G E 3	<p>Creation: Online research on Genesis - Read and make your own notes on the different views.</p> <p>Real cialis for sale, Cialis once a day cost - Neverofftopic Canadian Pharmacy. Best Prices!</p>	<p>Christianity: Listen to the podcast on 'The God Particle' – consider Is the “God particle” truly “a blow to the Christian faith,”?</p> <p>Does The “God Particle” Prove The Big Bang? Science, Scripture, & Salvation podcast</p>	<p>Islam: Listen to the following podcast on the History of Islam</p> <p>The History Of Islam podcast</p>

SCIENCE

	BRONZE (1 praise point per activity)	SILVER (2 praise point per activity)	GOLD (3 praise point per activity)
C H A L L E N G E 1	<p>Play the game – what is your fastest time?</p> <p>The Heart Quiz</p>	<p>Watch the video: BBC Two - Incredible Medicine: Dr Weston's Casebook, Series 1, Episode 1, The girl with her heart outside her chest</p> <p>Explain why the heart should be inside the heart.</p>	<p>Create your own Kahoot quiz based on the heart structure and circulatory system.</p>
C H A L L E N G E 2	<p>A mole is just a name given to a very big number. Make a list of numbers from everyday life that have a different name. For example, 100 is sometimes called a century. Now research Avogadro and his constant. See if you can write the number out in full. Why do you think we call this number a mole?</p>	<p>Find a few recipes that use eggs. Express the recipes in how many fractions of a dozen eggs they use. Can you work out how much of one of the other ingredients you would need if you used 2 dozen eggs?</p>	<p>How does the “Silver” you did relate to how we use moles?</p>
C H A L L E N G E 3	<p>Watch How Are Batteries Made?</p> <p>Note down the different components of a, "battery", and list what they do.</p>	<p>Note down the electron donor and receiver from the video? Can you write a chemical equation for the reaction? How about a half equation?</p>	<p>Why do you think we don't just generate all our electricity with batteries like this?</p>