



FEARNHILL
SCHOOL

Year 8

Super Curriculum

The Fearnhill School Super Curriculum

The super curriculum at Fearnhill 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: 'Figuring It Out' (easiest), 'Freewheeling' (more challenging), and 'Flying' (most challenging).

As you complete the challenges, you'll be given reward points, and if you complete all the 'Flying' challenges in any subject, you will be put forward to join our Fearnhill Flyers programme. Just show your teacher (or Miss Corbishley) evidence of what you've done!

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, Miss Corbishley.

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Art

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	<p>Practise using the formal elements of Art. Get involved with 'The Big Draw'.</p> <p>https://thebigdraw.org/30-day-drawing-challenge</p>	<p>Record your drawing challenge in a small sketchbook and make a drawing/sketch/g/collage every day for a month. This could be anything from a quick 5-minute study to a one hour masterpiece. Show your art teacher your artwork.</p>	<p>Present your challenge as an annotated journal and share it through Fearnfile and the school's social media pages with the hashtags #thebigdraw #drawingchangeslives</p>
Challenge 2	<p>Make a collection of examples of artwork and images that you find inspiring and record them in the back of your sketchbook. Refer to them in your work.</p>	<p>Make your own sketchbook using many different kinds of paper. There are lots of tutorials online that show different ways of doing this, but the one below works well:</p> <p>https://www.craftsy.com/papercrafts/article/how-to-make-a-diysketchbook/</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>http://www.nhm.ac.uk/visit/tring.html</p>
Challenge 3	<p>Visit the Google Cultural Institute Art Project website. This is an ongoing project where you will be able to see every piece of art work in the world:</p> <p>https://www.google.com/culturalinstitute/beta/partner?hl=en</p>	<p>Visit the Tate Britain to give you an insight into the history of British art. Watch extracts from the series:</p> <p>https://www.tate.org.uk/context-comment/video/meet-500-yearsbritish-art#open285623</p>	<p>Join Art Club and offer to lead a session. Encourage your peers to come along and try a new technique.</p>

Computing

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	<p>BBC Click: Watch this weekly BBC television programme covering news and recent developments in the world of consumer technology and innovations.</p> <p>http://www.bbc.co.uk/programmes/b006m9ry/episodes/player</p>	<p>The year 2100– Imagine that it is the year 2100. What will the world be like? How will technology have changed? What new inventions will have been created?</p> <p>Sketch a picture of a large city giving a perspective on what you think the world will be like in 2100.</p>	<p>Map of Computer Science: A fantastic short video summarising the field of computer science.</p> <p>https://www.youtube.com/watch?v=SzJ46YA_RaA</p>
Challenge 2	<p>Where it all started: Watch the TedTalk on The birth of the computer. George Dyson</p> <p>https://www.youtube.com/watch?v=EF692dBzWAs&index=1&list=PLF7032F8EB1A4F9E2</p>	<p>Computer Science Fundamentals - A collection of interactive quizzes that will help you master computer science fundamentals.</p> <p>https://brilliant.org/courses/computer-science-fundamentals/</p>	<p>Draw a design of a computer you think the next generation will be able to buy. What features will it have that the current computers do not have?</p>
Challenge 3	<p>Do some research into cyber security and the importance of being safe when using computers.</p>	<p>Animation18 – Using software of your choice, create a one-minute animation about cybersecurity threats and staying safe online. You could enter your creation into this competition:</p> <p>https://brilliant.org/courses/computer-science-fundamentals/</p>	<p>Research specific examples of when mistakes in cyber security have cost a company a large amount of money.</p>

Design Technology

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	<p>Read about Tim Peak's time in space.</p> <p>http://timpeake.esa.int/</p>	<p>Visit the Natural History museum.</p> <p>http://www.nhm.ac.uk/</p>	<p>Visit the Design museum, write an essay on an exhibit that you find interesting.</p> <p>https://designmuseum.org</p>
Challenge 2	<p>Listen to a podcast from a famous designer. For example, James Dyson:</p> <p>https://www.stitcher.com/show/how-i-built-this/episode/dyson-james-dyson-53265850</p>	<p>Visit the Science museum; find an interactive exhibition that uses new technology.</p> <p>https://www.sciencemuseum.org.uk/</p>	<p>Research and write up about the space X program and the new technologies it has led to.</p>
Challenge 3	<p>Watch the Stacey Dooley investigates documentary on the creation of cotton.</p> <p>https://www.bbc.co.uk/programmes/b03h2nqh</p>	<p>Choose a fusion 360 tutorial by Lars Christiansen and work through the project.</p>	<p>Create a new design for a local band/ group or team. Create a logo.</p>

Drama

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	<p>Research and find articles about Shakespeare from many different sources and create an information leaflet.</p> <p>Draw and label a diagram of The Globe for a display.</p>	<p>Choose a stimulus and create a story board of ideas that demonstrate the creative ways you could create drama.</p> <p>Watch Baz Lehmann's version of Romeo and Juliet. Write a review of the film in less than 300 words for a newspaper.</p>	<p>Read one of the Shakespeare plays. Write a summary of the play for someone who has never read it.</p> <p>Pick a scene from Romeo and Juliet and create a performance of it to show to your teacher.</p>
Challenge 2	<p>Read at least 2 plays by different playwrights and write a review of them before Easter.</p> <p>Research theatre posters and create a theatre poster for a play of your choosing.</p>	<p>Act out a key scene from a play that you have read and show it to your teacher.</p> <p>Write a short script about a year 8 trip abroad. Make sure it is realistic.</p>	<p>Give a presentation about your favourite play to your class</p> <p>Research an important British Playwright and create a display about them, including information about their life, their work, pictures etc.</p>
Challenge 3	<p>Research the Pendle Witches trial and write a piece of creative writing (diary entry, letter, monologue) as a person involved in the trials.</p> <p>Attend some live Theatre and make a note of the actor's use of Voice, Eyes, facial expression and movement.</p>	<p>Find a picture of that represents Crime or Punishment and write a creative monologue for an actor to perform and direct a friend in a performance of your work.</p> <p>Make a display of all the key words that explains the key elements that actors use when performing on stage.</p>	<p>Read the play "The Crucible" and write a summary of the play for a reader who has never read it before.</p> <p>Write a short naturalistic play script about crime and punishment. Include All stage directions that help an actor play the roles.</p>

English

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	<p>Watch Alex Wheatle’s videos about writing (scroll to the bottom of the page to find the others). Make bullet point notes about each one.</p> <p>https://www.englishandmedia.co.uk/video-clips/ks3-language-laboratory-writers-choices</p>	<p>Read the first chapter of ‘Crongton Knights’ and explain (in one paragraph) how Wheatle gains the reader’s interest.</p> <p>https://atombooks.tumblr.com/post/141250007161/read-chapter-1-of-crongton-knights-by-alex</p>	<p>Write the first chapter of a novel set in an urban environment (like London).</p>
Challenge 2	<p>Watch ‘Sherlock’ on Netflix or another murder mystery.</p>	<p>Read ‘Northern Lights’ by Phillip Pullman. Draw a Venn diagram to show similarities and differences to ‘Ruby in the Smoke’.</p>	<p>Read text from the genre of murder mystery (such as a book by Arthur Conan Doyle) and make a bullet point list of the plot and the key themes.</p>
Challenge 3	<p>Watch a film adaptation of ‘Much Ado About Nothing’ by William Shakespeare. You can find the animated version online.</p>	<p>Write a revision leaflet explaining the key themes in any Shakespeare play.</p>	<p>Write a script for a play using one of the main themes of any Shakespeare play as your inspiration. For example, love or lies (or both!)</p>

Food Technology

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Research the functions and sources for vitamins B1, B2, B3, Folate and B12.	Obtain the Good Food magazine and make notes on a nutrition article.	Find out (using the GCSE digital Food Tech text book) the conditions that can occur if vitamins B1, B2, B3, Folate and B12 are eaten excessively or are deficient in the diet.
Challenge 2	Research 2 new practical skills e.g. handling raw meat, rough puff pastry.	Cook a new product containing 2 skills e.g. a pie - pastry making and sauce making.	Invent a new product which contains the 2 new skills.
Challenge 3	Identify 3 foods (1 mustn't be fruit and vegetables) which are in season in the UK during winter, spring, summer and autumn.	Visit a farm shop/fishmongers/butcher to see the seasonal foods.	Create a product using the seasonal ingredients.

Geography

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Visit the Fair Trade Website and watch short films on website	Create a homework quiz on a topic you have learnt about in Geography	Conduct a survey within year group to investigate who are technocentric, anthropocentric and ecocentric - graph the results.
Challenge 2	Learn the names of all the countries and capitals in Europe.	Mark on the capital cities on a map of Europe or any other continent.	Map a major global river from source to mouth - include major river features and cities.
Challenge 3	Investigate the major exports of 2 HICs and 2 LICs - are these primary or secondary goods?	Prepare a presentation for your year group on the story of stuff and a better sustainable way of living.	Investigate the anaerobic digestion occurring at Baldock site (down the road).

History

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Visit Hatfield House and make a scrapbook of the information you learn there about Elizabeth I and the Tudors.	Create a poster arguing for the emancipation (freedom) of slaves that could have been used by abolitionists in the 1800s.	Write an essay in response to the following: "Queen Mary I was the best Tudor Monarch". Do you agree?
Challenge 2	Read "Horrible Histories – The Wicked Witches" by Terry Deary.	Write a diary entry pretending you are a soldier during the English Civil War. You could be either a Cavalier or a Roundhead.	Listen to the British Empire podcast from Melvyn Bragg's "In Our Time": https://www.bbc.co.uk/programmes/p00548jd
Challenge 3	Create factfiles for two of the Hanoverian monarchs. Include at least ten facts for each monarch. http://www.englishmonarchs.co.uk/hanover_11.htm	Write a play about the events of the Gunpowder plot.	Create a guide of key leisure activities for someone new to Tudor England. Make sure you explain who these activities were for!

Maths

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Use mymaths.co.uk to complete some KS3 boosters.	Play the mymaths times it out grid game.	Once you have tried this a few times if you get to the leader board please print screen this and show it to your teacher.
Challenge 2	Research Pythagoras and the maths he explored – find out all his contributions to modern Mathematics.	Try to learn as many square numbers as you can, see if you can remember all square numbers up to 25 squared as a challenge. You might like to learn some Pythagorean triplets.	Look at the Pythagoras proof that was written by President Garfield (President of USA in 1881). Do you think the current US president could write a proof for Pythagoras?
Challenge 3	Circle Song – use it to memorise area and circumference formulae. https://www.youtube.com/watch?v=-z4SUypJZxo	Try to create your own song that can help you to remember a formula that you have found difficult to remember in the past.	Explore some of the problems from the nrich.maths site to develop your problem solving skills. http://nrich.maths.org/secondary-lower

French

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Watch a Disney film you know in French with subtitles in English. Make notes of any new words you learn.	If you have visited France, write a diary about the trip and include photos.	Read some nice, authentic French Haikus: http://www.modernhaiku.org/essays/frenchhaiku.html
Challenge 2	Keep in touch with the latest French news at: www.jde.fr	Research a famous French sportsperson or actor and make a PowerPoint presentation for the class.	Watch the film: Les Choristes (The whole film is on Netflix in French with English subtitles)
Challenge 3	Research the town and the region of Pas de Calais.	Try this site for song activities in many languages using the text: http://lyricstraining.com/	Put your phone settings or the settings on your favourite computer game into French.

Spanish

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Watch a Disney film you know in Spanish with subtitles in English. Make notes of any new words you learn.	If you have visited Spain, write a diary about the trip and include photos.	Read online books written for language learners: http://www.milcuentos.com/
Challenge 2	Keep in touch with the latest Spanish news at: https://www.bbc.com/mundo You can read and listen to stories in English too.	Research a famous Spanish-speaking actor and make a PowerPoint presentation for the class. Try, Gwyneth Paltrow, Jennifer Lopez, Mila Kunis, Penelope Cruz, Antonio Banderas.	Watch the film Voces Inocentes about the struggles of a 12 year old boy during the civil war in El Salvador.
Challenge 3	Listen to the free access Podcasts at Coffeebreak Spanish: https://radiolingua.com/category/coffee-break-spanish/	Try this site for song activities in many languages using the text: http://lyricstraining.com/	Put your phone settings or the settings on your favourite computer game into Spanish.

Music

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Listen to an entire Beatles album and write a review, commenting on at least three songs.	Learn to sing and play a Beatles song of your choice, either on piano or guitar.	Write a song for piano and voice or guitar and voice in your own time.
Challenge 2	Complete an online grade 2 music theory test at least twice, improving your score. https://gb.abrsm.org/en/theory2018/music-theory-2018-quiz/	Learn to play a grade 1 piano piece in your own time.	Learn to play a piano piece at a grade 2 standard.
Challenge 3	Go and see a live orchestra in concert, or find and listen to a concert on youtube. Write a short review of what you have seen.	Learn to play a famous Classical theme such as 'Ode to Joy' on the piano.	Play an arrangement of a Classical theme in four parts with three friends.

PE

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Read at least 3 articles about the past two Olympics.	Watch a sporting event from the past two Olympics.	Create a storyboard on the development/history of the Olympics.
Challenge 2	Watch a live school or elite level sporting competition.	Perform for the school in any sport including House sports.	Lead your tutor group in an inter-house event and consider becoming Sports Captain for a team.
Challenge 3	Write a glossary of skills used in your sport.	Create a timeline of the history of your chosen sport.	Write a persuasive letter to the Prime Minister explaining why PE should have an important role in the curriculum.

PRE

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Philosophy: Read chapters you are interested in in 'Sophie's World' by Jostein Gaarder.	Christianity: Read 'The Lion the Witch and the Wardrobe' by CS Lewis.	Ethics: Read chapters you are interested in 'Philosophy Files' by Stephen Law
Challenge 2	Existence of God: Watch the film 'Bruce Almighty' – what does it teach about the nature of God?	Philosophy - Are you real? Watch Ted Ed lectures The Big Question and complete the quiz, you could do the dig deeper section. http://ed.ted.com/lessons/how-do-you-know-you-exist-james-zucker	Problem of Evil: Online research – What happened in Anne Frank's life? How did she live and what were the issues they faced?
Challenge 3	Thinking: Try the art of meditation. https://www.youtube.com/watch?v=98ficcEuns	Problem of Evil: See the exhibition on the holocaust. http://www.iwm.org.uk/exhibitions/iwm-london/the-holocaust-exhibition	Philosophy: Get the bigger picture on the history of philosophy. https://www.youtube.com/watch?v=VDiyQub6vpw&list=PLwxNMB28XmpfEr2zNKQfU97eyEs70krSb

Science

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Find out the 3 naturally magnetic materials	What factors affect electromagnetic strength?	Create an invention that uses electromagnetism.
Challenge 2	Create a model of the digestive system.	Research a disease that can affect the digestive system. Respond to this article with regard to symptoms, treatments and dangers. Try to evaluate possible treatments in your research.	Create a news report (video or podcast) outlining the dangers of digestive problems and how people can protect themselves.
Challenge 3	Research what a carbon footprint is.	Calculate your carbon footprint: https://footprint.wwf.org.uk/questionnaire	Make a podcast or a radio advert that has to be one minute long to tell people how to reduce their carbon footprint. If you like, add it to YouTube.