

Year 7 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.

Contents

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

Art

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 1	Practise using the formal elements of Art. Get involved with 'The Big Draw'. https://thebigdraw.org/ 30-day-drawing-challenge	Record your drawing challenge in a small sketchbook and make a drawing/sketch/g/collag e 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.	Present your challenge as an annotated journal and share it through Fearnfile and the school's social media pages with the hashtags #thebigdraw #drawingchangeslives
Challenge 2	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.	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: https://www.craftsy.co m/papercrafts/article/h ow-to-make-a- diysketchbook/	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. http://www.nhm.ac.uk/ visit/tring.html
Challenge 3	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: https://www.google.co m/culturalinstitute/beta /partner?hl=en	Visit the Tate Britain to give you an insight into the history of British art. Watch extracts from the series: https://www.tate.org.u k/contextcomment/vide o/meet-500- yearsbritish- art#open285623	Join Art Club and offer to lead a session. Encourage your peers to come along and try a new technique.

Computing

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 1	Learn about Alan Turing and his code breaking computer.	Try these simple codes at home: <pre>https://rediscoveredfa milies.com/secret- codes-for-kids/</pre>	Attend the computing club.
Challenge 2	Create a poster showing everything you know about place value in mathematics; it might not seem to link but it makes more sense when we look at Binary.	Try the place value exam style questions: https://corbettmaths.c om/wp- content/uploads/2013/ 02/place-value-pdf.pdf	Research different systems. This might be binary or hexadecimal systems.
Challenge 3	Carry out some research to find out about some unusual careers with the tech and Compute Science industry. Digital locksmith? Drone operator? Professional hacker?	Write a short essay debating the following question - Will computer assisted education replace the need for teachers in the future?	Try to create a video or activity that might go some way to replacing the need for a teacher for a topic in your favourite subject.

Design Technology

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 1	Watch the Blue Planet series and make notes on how they filmed the series. www.bbc.co.uk/iplayer	Visit the Natural History museum . http://www.nhm.ac.uk/	Visit the Design museum, write an essay on an exhibit that you find interesting. https://designmuseum. org
Challenge 2	Find out who designed and manufactured your favourite product, e.g. iPhone, X box, PS4.	Visit the Science museum; find an interactive exhibition that uses new technology. https://www.sciencemuseum.org.uk/	Create an A3 presentation on a chosen designer, e.g. Charles Rennie Macintosh
Challenge 3	Watch a 'how it's made' video on YouTube. https://www.youtube.c om/channel/UCELt4noc nWDEnYJmov4zqyA	Download Fusion 360, it is free. https://www.autodesk.co.uk/products/fusion-360/students-teachers-educators Choose a tutorial by Lars Christiansen and complete the activity.	Visit a local landmark. Find out about how and when it was made. Who was the designer?

Drama

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
	Watch some live	Make a display of all	Write a short play script
	Theatre and make a	the key words in Greek	based on A Greek or
	note of the actor's use	theatre that explains	other culture myth. All
	of Voice, Eyes, facial	the key elements of	stage directions that
	expression and	this style.	help an actor play the
	movement and write a	Chose a theatre Style	roles.
e 1	comparison to what	form a different	Write a lesson plan
eng	you know a Greek	culture and write an	where you introduce
Challenge	presentation would	information leaflet on	theatre form another
Ö	look like.	it - with pictures	Culture.
	Read a Myth from	suitable for a year 7	
	another culture and	student.	
	summarise it in 10		
	sentences.		
	Read at least 2 plays	Act out a key scene	Give a presentation
	from the library.	from a play that you	about your favourite
	Read at least 3 fictional	have read.	play to your class.
e 2	books from the library	Write a short play	Watch a live
Challenge	(since September).	based on your	performance and write a
alle		experience of starting	review of it in 250
S		a new secondary	words.
		school.	
	Find 3 different stimuli	Chose a stimulus and	Write a lesson plan
	that could act as a	create a storyboard of	where you introduce a
	starting point for a	ideas that	chosen stimulus to your
	piece of Drama.	demonstrate the	tutor group.
9	Create a storyboard of	creative ways you	Direct a group of
Sug	an idea for Drama	could create drama.	students in a short
Challenge 3	based on the title "The	Write a short play	improvised play entitled
S	Unexpected Guest"	script for people based	"Home sweet Home"
		on the word	
		"Refugee"	

English

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 1	Watch Harry Baker perform his poem about maths and Caleb Femi perform his poem ('Fam'). You will need to scroll to the bottom of the page for the second video. https://www.englishandmedia.co.uk/video-clips/ks3-poetry-plus-say-it-out-loud	Illustrate your favourite poem in a dynamic and interesting way.	Write your own poem about a topic that you are passionate about. Share with 2 friends or family members and record their feedback.
Challenge 2	Read three 500-word stories that were placed in the top 50 in Radio 2s competition. For each one, explain why you think it is effective (bullet points). https://www.bbc.co.uk/programmes/articles/43 jry47zvF7j8pctzXjlQCY/t op-50-stories-2018-age- 10-to-13	Write your own 500 word story and share with 2 of your friends, recording their feedback.	Edit your story and enter the Radio 2 competition. Make sure that you share your story with your English teacher too!
Challenge 3	Read 'War Horse' by Michael Morpurgo.	Write a diary entry from the perspective of someone fighting in the trenches during the First World War.	Research war poets in more detail, reading poetry from different wars and making a poster to show your findings. https://www.poetryfoundation.org/

Food Technology

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Research this question: How is flour produced?	Make a product using the 'rubbing in' method.	Visit a mill to see flour being produced.
Challenge 2	Research this question: How is milk produced?	Make a milk-based sauce.	Visit a dairy to see cows being milked and the milk being pasteurised.
Challenge 3	Identify 2 fruits and vegetables which are in season in the UK during winter, spring, summer and autumn.	Visit a farm and discover how food is sourced and when it is in season.	Make a product of your choice using seasonal ingredients.

Geography

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 1	Complete all the quizzes and games on OS map zone.	Map the 10 highest populated cities in UK and 10 longest rivers on a blank map of UK.	Gain evidence to assess whether Letchworth is a high order or low order settlement.
Challenge 2	Learn the names of all the countries in Europe.	Investigate 3 different UK cities and assess the reason for their site.	Help improve the school environment by turning off lights, reminding teachers to turn off projectors and putting rubbish in bins.
Challenge 3	Visit google maps and map your walk to school and calculate walking distance.	Look at the weather for 5 different places globally (hot, cold, dry, wet, all). What patterns do you see?	Create your own rain gauge (see NFR) keep a weather diary (temperature - smart phone app and rainfall) over a week.

History

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Watch 2 episodes of 'Horrible Histories'. There are lots to choose from on BBC iplayer!	Write a timeline showing the key events in your life so far. Aim to include at least 15 events, remembering to put them in chronological order.	Write a paragraph explaining why it is important to study History at school.
Challenge 2	Visit the site of a castle and make a poster about the castle's key features. There are lots to choose from: http://www.britainirelandcastles.com	Design a poster about a famous figure from History to be displayed in your classroom.	Create a leaflet about studying History in year 7 at Fearnhill for next year's students.
Challenge 3	Read a piece of historical fiction – there are lots to choose from in the library!	Design and make a model of Black Death victims – make sure you include all of the symptoms of the Black Death!	Go to the school History club and get involved in some of their exciting events!

Maths

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points	(10 reward
		each)	points each)
Challenge 1	Solve the Monty Hall Problem. Complete a poster explaining the theory behind the problem. Suppose you're on a game show, and you're given the choice of three doors: Behind one door is a car; behind the others, goats. You pick a door, say No. 1, and the host, who knows what's behind the doors, opens another door, say No. 3, which has a goat. He then says to you, "Do you want to pick door No. 2?" Is it to your advantage to switch your choice?	Try these simple codes at home: https://rediscovered families.com/secret-codes-for-kids/	Attend the mathematics club.
Challenge 2	Create a poster showing everything you know about place value and the decimal system.	Try the place value exam style questions: https://corbettmath s.com/wpcontent/u ploads/2013/02/pla ce-value-pdf.pdf	Research different systems. This might be binary or hexadecimal systems.
Challenge 3	Create a times table grid that goes from 1 – 15, you can draw this out on paper or use a computer to help you.	Play a mymaths game and try to get on the leaderboard.	Watch the video regarding the Ethiopian Method of multiplication and link this to the binary you did in the previous task. https://www.yo utube.com/wat ch?v=uXOTKidm 7A0

French

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 1	Watch 'Peppa Pig' in French (YouTube). Make a note of any new vocabulary that you learn.	Research a town or region in France and make a PowerPoint presentation for the class.	Searchable MP3 clips by topic, level and language: http://www.audio-lingua.eu/?lang=en
Challenge 2	Read French magazines online.	Prepare a vocab booklet for a trip to France with key vocab and phrases.	Work through the French beginners and more advanced exercises on the website below: www.languagesonline.or g .uk
Challenge 3	Listen to the free access Podcasts at Coffeebreak French: https://radiolingua.com /coffeebreakfrench/	Log on to the website below after 4PM or at weekends. Work on the beginner activities http://zut.languageskills.co.uk/index.html	Find out about other Francophone countries and make a short PP presentation on one for the class.

Spanish

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 1	Watch Peppa Pig on Youtube in Spanish. Make notes of any new words you learn.	Research a town or region in Spain and make a PowerPoint presentation for the class.	Searchable MP3 clips by topic, level and language: http://www.audio-lingua.eu/?lang=en
Challenge 2	Read Spanish magazines online.	Prepare a vocab booklet for a trip to Spain with key vocab and phrases.	Work through the Spanish beginners and more advanced exercises on the website below: www.languagesonline.or g.uk
Challenge 3	Keep in touch with the latest Spanish news at: https://cnnespanol.cnn.com/category/ninos/	Log on to the website below after 4PM or at weekends. Work on the beginner activities http://oye.languageski lls.co.uk/index.html	Find out about other Spanish speaking countries and make a short PP presentation on one for the class.

Music

		Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
_			(5 Tewara points each)	(10 Tewara points each)
		Complete the free	Learn to sing a simple	Learn to sing a song in
		levels on the app	folk song in tune (such	two-part harmony with
'	ge 1	'RelativePitchLite'.	as Wild Mountain	your friend.
	eng	Show your results to	Thyme or Who Will	
	Challenge 1	your music teacher.	Sing Me Lullabies?)	
	כ			
		Complete an online	Learn to play a simple	Learn to play a piano
		grade 1 music theory	piano piece in one	piece at a grade 1
		test at least twice,	hand position, with	standard.
		improving your score.	both hands (examples	
	;e 2		may include 'Mary	
	eng	https://gb.abrsm.org/e	Had a Little Lamb' or	
:	Challenge	n/theory2018/music-	'Lightly Row').	
7	5	theory-2018-quiz/		
		Go and see a live	Learn to play a famous	Play an arrangement of a
		orchestra in concert, or	Classical theme such	Classical theme for two
		find and listen to a	as 'Ode to Joy' on the	or more pianos with one
(m	concert on youtube.	piano.	or more friends.
	Challenge 3	,	·	
:	<u>e</u>	Write a short review of		
7	Chi	what you have seen.		

PE

	Figuring It Out (2 reward points each)	Freewheeling (5 reward points each)	Flying (10 reward points each)
Challenge 1	Visit a sporting stadium or museum and take a photo of any items or information that interests you the most.	Watch a sport of your choice at elite level and summarise the performance.	Write a sports report for Fearnfile team's latest performance or an area of interest.
Challenge 2	Read BBC Sports News regularly and surprise your PE teacher with a fact that they didn't know!	Create a storyboard of an article that interests you the most.	Attend a school sports club. Consider trying a new sport or leading a warm up.
Challenge 3	Create a new game or gymnastics routine.	Teach your new game or gymnastics routine to someone else.	Write a persuasive letter to the Prime Minister, giving your thoughts on the importance of school sports and why it should have a place in the curriculum.

PRE

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
	Religious stories	Christianity	Introduction to the five
			major world religions
	Read some stories from	Read The Lion the Witch	
	the interactive Sacred Texts featured in the	and the Wardrobe by CS Lewis.	Watch:
7e 1		Lewis.	http://ed.ted.com/lesso
en.	Sind Sind Library		ns/the-five-major-
Challenge	http://www.bl.uk/learni		world-religions-john-
	ng/citizenship/sacred/s		<u>bellaimey</u>
	acredintro.Html		
	Introduction to the Six	Places of worship	Judaism – Moses and
	Religions we study.		the Exodus
		Research the	
	Online research: choose	Synagogue, Church or Mosque on BBC	Watch Dreamworks 'Prince of Egypt' film.
6 2		iWonder website:	Prince of Egypt IIIII.
ene	, research from the page.	The first we some in	
Challenge	http://www.primaryho	http://www.bbc.co.uk/g	
	meworkhelp.co.uk/Relig	<u>uides/zqdjrdm</u>	
	ion.html		
	Christianity	Christianity	Living religion in the
			community
	Watch The Lion the	Do online research	Maria Carla dada a
Challenge 3	Witch and the Wardrobe by CS Lewis.	about Christian beliefs – use REQUEST website,	Visit a Cathedral or similar centre of
	,	information about	worship online. Write a
		Christian beliefs and	postcard explaining
		values written from a	what you have seen.
Cha		Christian perspective	
		http://www.ch.aua.html	
		http://request.org.uk/lif e/beliefs/	
		<u>Crochers</u>	

Science

	Figuring It Out	Freewheeling	Flying
	(2 reward points each)	(5 reward points each)	(10 reward points each)
Challenge 2 Challenge 1	Create a model of an animal and plant cell, outlining the key differences in their components. Models can be made in 3-D or on a poster. Create a Youtube Account and subscribe to at least two reliable video resources (https://www.youtube.com/user/crashcoursekids) Once subscribed, write a paragraph outlining why this is a reliable resource to use for	Deliver a presentation outlining the key differences between plant and animal cells. Create a video or PowerPoint, outlining the criteria that makes a resource reliable for research. Presentation should also include the risks of using an unreliable resource.	(10 reward points each) Make your own quiz on the topic of cells and ask your teacher to share it with the class. Be sure to use different level questions. Print out two opposing articles on a topic of your choice in Science. In a report, compare and evaluate the two sources based on validity and how reliable they are.
Challenge 3	review. Strava/map my run (or similar app to collect data on your journey to school or run/walk around Letchworth/ local park. Use time and distance to calculate & check speed.	It takes 10 minutes to reach the international space station which is 408 km away How fast does a space shuttle go in km/hr?	Find data on the distance of each planet from earth in our solar system. Calculate how long would it take you to get to each planet in our solar system and evaluate which planets humans could travel to.