

Key Stage 3 Foundation Stages Reference Guide

<u>Art & Design</u>

	Big Picture Knowledge and inspiration	Big Picture Experiment and refine	Big Picture Skill	Big Picture Creative outcomes
BFS (Bey- ond FS)		An independent highly develo	ped ability of Foundation Stage 5	
FS5	Research- I independently research artists and themes and find my own relevant inspiration. Inspiration- Artist links are always clear, relevant, and explained within my work. I am able to independently take this inspiration and make it my own. Knowledge- I understand how and why art movements have evolved and can express my informed opinion of art using correct	Experiment- I independently experiment with a range of media and combine media in successful outcomes. Refine- I always improve my ideas/ techniques and skills and have a range of options. Manipulation of media shows improvement as wok progresses.	Drawing- I show high ability in observation, ideas and insights. My drawings show a high level of accurate detail, and the style is relevant to my way of working. Media manipulation- I show a highly developed skillful manipulation of a range of media showing high levels of detail. Outcomes are relevant to intentions and alterations are made independently as needed. My presentation is of a high standard and all sketchbook pages are planned and well executed.	Outcomes- My final outcomes show a high level of skill are well refined and my development is clear throughout. I create a creative personal response realising my plans.

FS4	Research- I research artists and themes suggested by my teacher and find my own inspiration. Inspiration- Artist links are always clear, relevant and explained within my work. Knowledge- I understand how art movements have evolved and can use some correct terminology.	Experiment- I experiment with media and make successful decisions. Refine- I improve my ideas/ techniques and skills on my own using the success criteria as guidance. Manipulation of media is improving as work progresses.	 Drawing- I am able to record observations, ideas and insights. My drawings show a good level of detail and are observed accurately. Media manipulation- I show a skillful manipulation of a range of media showing good levels of detail. Outcomes are relevant to intentions and alterations are made as needed. 	Outcomes- My outcomes show an improved level of skill but are largely led by my teacher. My creativity is developing as I study more artist.
FS3	Research- I am starting to make decisions about what inspiration I take from artists that have been suggested by my teacher. Inspiration- Artist links are clear and relevant. Knowledge- I am developing an understanding of how art movements have evolved.	Experiment- I experiment with media making successful decisions with help from my teacher. Refine- I sometimes improve my ideas/ techniques and skills on my own using the success criteria as guidance.	Drawing- I am able to record observations, ideas and insights. My pencil control is developing and some details/ proportions are recorded accurately. Media manipulation- I experiment with a range of media and am beginning to manipulate materials as desired.	Outcomes- My outcomes show a developed level of skill but are led by my teacher.
FS2	Research- I can find relevant information and images of artists work suggested by my teacher. Inspiration- I am starting to take inspiration from artists. Knowledge- I am beginning to understand how art movements have changed over time.	Experiment- I experiment with a range of media selected by my teacher. Refine- I improve my ideas/ techniques and skills when prompted by my teacher.	Drawing- I show some ability to record observations, ideas and insights. My pencil control needs further improvement as some details/ proportions aren't recorded accurately. Media manipulation- I experiment with a range of media selected by my teacher. I am attempting to manipulate media as desired.	Outcomes- My outcomes show an improvement of skill but are led by my teacher.
FS1	Research - I can find information and images of artists work suggested by my teacher.	Experiment- I explore a range of media as instructed by my teacher.	Drawing- I show limited ability to record observations, ideas and insights. My basic shapes are	Outcomes- My skills are still improving and the response is led by my teacher.

Inspiration- I appre artists work but it do influence my own ye Knowledge- I know movements have ch over time but I am n how or why.	es not ideas/ techniques and skills w t. prompted by my teacher. that art anged	my recognisable but proportions and details are often inaccurate. Media manipulation- I explore a range of media as instructed by my teacher. Limited ability to manipulate media as desired.	
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Beliefs & Values

Grade	Application and expression ideas related to religions and worldviews	Knowing about and understanding religions and worldviews	Spelling Punctuation and Grammar
BFS	 Assemble cross-unit and cross-curricular links and references. Application of wider concepts from prior learning in a new context. Form logical chains of reasoning leading to a justified conclusion. Analyse arguments cogently, justifying perspectives 	 Synthesise substantive concepts from previous Beliefs and Values units and other subject disciplines. Refer to and unpick the context and meaning of scripture 	 No spelling or punctuation mistakes Rules of grammar used with effective control of meaning A wide range of specialist terms are used from different perspectives/viewpoints.
FS5	 Appraise the strengths, weaknesses, value and impact of a belief or practice. Express a well-supported viewpoint within differing opinions 	 Offer diverse and differing beliefs/understandings/ practices. Quote a variety of sources of wisdom (including scripture) with accuracy and flair (for different perspectives) Interprets sources of wisdom, showing understanding of divergence within religious belief 	 Responds to all parts of the question with accurate detail showing a good understanding and use of specialist terms
FS4	 Evaluate and interpret diverse beliefs, practices and sources of wisdom (including scripture) 	 Explain, in detail, different understandings of beliefs & practices Explain opinion with acknowledgement of why someone might disagree. Use of accurate sources of wisdom (including scripture). 	 A few spelling and grammatical errors Use a good range of specialist terms correctly

FS3	 Articulate the impact of a belief on its followers/community. Explain varying beliefs and impacts. Give personal reflections and opinions. 	 Demonstrate varying understandings of beliefs/practices of more than one point of view. Use a range of reasons for personal opinion. Know sources of wisdom, including using quotes, and use with considerable accuracy. 	 Uses key terms Writes in full paragraphs with correct punctuation
FS2	 Describe beliefs, ideas or practices with reasons. Connect beliefs with practices. Justify by giving reasons and explanations. 	 Uses concepts, beliefs and practices and acknowledge their impacts on believers/communities. Show awareness of sources of wisdom (including scripture). 	 Spelling and punctuation are mainly correct Rules of grammar are used and any can put forward ideas coherently Only use a limited range of specialist terms as appropriate
FS1	 Outline and refer to beliefs/practices or ideas Offer brief opinions on beliefs or practices 	 Retell concepts, beliefs or practices. Recognise and refer to meaning (including sources of wisdom/scripture). 	Uses full sentences
PFS (pre)	 Identify, match or retrieve information about beliefs or practices 	Notice key beliefs, practices, terms and people	Writes in list form

Computing

	Algorithms	Communication	Data	Information Technology	Programming	The Computer
BFS	 Design a solution to a problem that depends on solutions to smaller instances of the same problem (recursion). Be able to understand that some problems cannot be solved computationally. Be able to select, justify and apply appropriate techniques and principles to develop data structures and algorithms for the solution of problems. 	 Explain how to setup a LAN and a WAN including hardware, protocols and MAC addresses. 	 Convert between binary, denary and hexadecimal numbers. Subtract binary numbers. Explain the different types of compression (and why we need them). Explain (and make) a simple relational database 	 Understand the ethical issues surrounding the application of information technology, and the existence of legal frameworks governing its use e.g. Data Protection Act, Computer Misuse Act, Copyright etc. Comment critically on the consequences of current uses of computing, including economic, social, legal and ethical issues explains emerging technologies and their implications for future use of ICT 	 Design a program - with pseudocode optimised (least no of lines). Write a complex program. Always write procedures. Code is always commented and optimised. Use a range of loops including while, for and loop counters Use 2D data structures. Explain 2D data structures. Create a detailed test plan and code is bullet proof 	 Know what a low level programming language is and can give some examples. Explain Moore's Law. Explain how processors multitask.

FS5	 Recognise that the design of an algorithm is distinct from its expression in a programming language. Evaluate the effectiveness of algorithms and models for similar problems. Recognise where information can be filtered out in generalizing problem solutions. Use logical reasoning to explain how an algorithm works. Represents 	 Explain how web servers process and store data. Explain how the data protection act relates to online users. 	 Explain why some images become pixelated. Explain why higher resolution means better data quality. Create different logic gate and truth tables. Explain the different ways data is stored in programs and explain how to convert data types. 	 Create creative projects that collect, analyse, and evaluate data to meet the needs of a known user group (target audience). Effectively design and create digital artefacts for a wider or remote audience. Consider the properties of media when importing them into digital artefacts (file types) Document user feedback, the 	 Pass parameters to different functions. Use variables in different procedures and explain how variables work in/out functions. Appreciates the effect of the scope of a variable. Use a wide range of loop structures for the correct purpose. Explain when to use different loop structures. Find errors in complex programs and then correct them. 	 Explain what virtual memory is. Explain what a disk defragmenter does
	reasoning to explain how an			artefacts (file types)	complex programs and then correct	
	-			 feedback, the improvements identified and the refinements made to the solution. Explain and justify how the use of 		

the same algorithm design.HTTP/S,TCP/ IP . Know how to use technologies and online services securely.Explain how resolution effects file sizes.achieve given goals.function for the right job.why we need one.• Explain how packet switching works• Explain how effects file sizes.• Evaluate the trustworthiness of digital content and considers the usability of visual design and compare it to a variable.• Use NOT operands (e.g. not equal to)• Explain how the CPU uses registers and how memory is located.• Explain how packet switching works• Explain what a and compare it to a variable.• Make a 1d array. Bug fix syntax and logic errors. Write a routine to save data to a file.• Make a 2D array. Bug fix syntax and logic errors. Write a routine to save data to a file.

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			advice on how to	use of		
			keep data safe.	technology can		
				impact on		
				society.		
				Design criteria		
				for users to		
				evaluate the		
				quality of		
				solutions. Use		
				the feedback		
				from users to		
				identify		
				improvements.		
				Make		
				appropriate		
				refinements to		
				the solution.		
FS3	 Use an iteration 	 Explain how 	 Know what 	 Know what 	 Explain how 	Explain what the
	and explain what	search engines	binary is and	binary is and	algorithms match	main parts of the
	this means.	rank search	why computers	why computers	code.	computer do.
	 Write different 	results.	use it.	use it.	 Use a text-based 	Explain how the
	algorithms for a	Make a simple	Know how	Know how	programming	CPU works with
	simple problem.	website using	images are	images are	language.	memory.
	Algorithms are	HTML. Explain	represented on a	represented on a	Use more than one	Explain the
	well organised	(and use) CSS.	computer.	computer.	operand (/ * - +) in	fetch-execute
	and presented	 Explain how the 	Explain what	Explain what	a programming	cycle. List more
	neatly.	• Explain now the internet works.	compression is.	compression is.		than three
	,		Give examples	Give examples	language.	
	Make a	Explain how a	-	-	Use a Boolean	operating
	search/sort	network works	of data types;	of data types;	(true/false).	systems.
	algorithm	(LAN). Explain	real, integer,	real, integer,	Select and use	 Explain what
		what cloud	Boolean.	Boolean.	different data	open source
					types.	means.

		computing means. • Explain the difference between LAN and WAN	 Use a range of queries to find answers to problems. Use a simple query language to query a data structure. Explain what DDOS and other attacks are. 	 Use a range of queries to find answers to problems. Use a simple query language to query a data structure. Explain what DDOS and other attacks are. 	 Explain why translators are needed. Explain some facilities of programming languages 	 Explain how to maintain an operating system using some utilities.
FS2	 Be able to explain why algorithms are necessary. Be able to explain how algorithms relate to computers. Show a different way of writing an algorithm for the same problem. 	 Explain what 'web crawler programs' are. Explain lots of golden rules for being a responsible online user. Give at least two ways to report concerns when online 	 Create a complex search using more than one field. Use Boolean and other operators in my searches (not, and, or,>) 	 Decide how to change work to meet different audiences. Evaluate own work. Explain how IT can be used for collaboration when computers are networked. Use criteria to evaluate the quality of solution. Identify improvements making some refinements to the solution, and future solutions 	 Explain when to use and IF ELSE instead of just an IF. Use a FOR loop. Write a procedure. Explain why you use a procedure 	 Explain what computers are used for and the benefits to society. Explain three functions of an operating system. Explain the hardware needed to setup wired and wireless networks.

FS1	 Use selections (IF and ELSE) Use inputs or outputs 	 Tell the difference between the internet and the World Wide Web. List different ways to communicate online. Give a list of acceptable and unacceptable behaviour when using technologies and online services. 	 Give examples of changing data into information Use a database to search for information Use filters Explain some ways of keeping data safe 	 Collect, organise and present data and information that is suitable for the purpose. Make appropriate improvements to solutions based on feedback received Comment on the success of the solution they've made 	 Collect, organise and present data and information that is suitable for the purpose. Make appropriate improvements to solutions based on feedback received Comment on the success of the solution they've made 	 Explain examples of input devices. Give you examples of sensors. Explain what sensors are used for (data). Explain how software can be used to collect data. Explain the difference between software and hardware and give examples. Explain what the main parts of a computer are
Pre- FS	 Fix problems with an algorithm Make a loop in an algorithm 	 Use a search engine to find suitable information quickly Give rules for keeping safe online Give examples of what would be 	 Explain what data is Give examples of different types of data Explain how data links to information Tell you the difference 	 Make a simple program using LOGO. Fix problems in a program. Explain why instructions need to be accurate for computers. 	 Make a simple program using LOGO. Fix problems in a program. Explain why instructions need to be accurate for computers. 	 Explain why computers aren't intelligent. Explain some basic things you need to start using a computer.

	 inappropriate when online Explain how to report inappropriate things that might happen online 	 between text and numbers Use a database to store data 	 Use an IF statement in a program. Look at some simple code and explain what it does. Spot some mistakes in code. Solve a simple logic problem. 	 Use an IF statement in a program. Look at some simple code and explain what it does. Spot some mistakes in code. Solve a simple logic problem. 	 Know that somebody has to write programs. Explain what coding is. List different types of digital devices. Give an example of hardware and software. Tell you what a program/app is.
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Design Technology

BFS	To achieve beyond foundation stage , students' work will show that they have securely met all the statements within the grade FS5 descriptor, with exceptional performance in most or all aspects. This could include more detail, greater accuracy, independent work, excellent drawing communication and presentation, extension questions, challenge activities, coaching others, super curriculum work, LORICA points for all areas and any other evidence that you the teacher believes justifies this judgement.
FS5	Advanced Mastery At this level, the student showcases an excellent level of expertise in Design and Technology, reflecting mastery in knowledge and skills. Their attitude is one of firm commitment to excellence, safety, and responsibility. They consistently complete tasks to an exceptionally high standard, setting a benchmark for their peers. Their organisational skills are exemplary, and they exhibit critical thinking across all aspects of design and technology. Actively seeking out and completing extension activities is a norm. Their willingness to read, discuss and apply key terms with enthusiasm and precision is a hallmark of their literacy skills. They demonstrate mastery in all areas, setting the highest standard in designing, making, and communicating.
FS4	Proficient Achiever The student shines and is enhancing in their understanding of design and technology principles, demonstrating solid knowledge and skills. Their attitude is characterised by a strong work ethic, safety consciousness, and a commitment to responsibility. They consistently complete tasks to a high standard, actively participating in safety practices and displaying excellent organisational skills including completing homework. Critical thinking is evident in their work and application of knowledge. They often exceed expectations by actively engaging in extension activities. Their willingness to read and apply key terms effectively is a notable strength, with substantial improvements in spelling and grammar.
FS3	Competent Performer At this stage, the student has achieved a good grasp of design and technology concepts, reflecting a substantial increase in

	knowledge and skills. Their attitude is characterised by a strong work ethic, safety consciousness, and a growing sense of responsibility. They consistently complete tasks satisfactorily and exhibit improving organisational skills. Application of knowledge in designing, making, and communicating is becoming more proficient. Engagement in extension activities is becoming more consistent. Literacy skills are improving, with enhanced reading comprehension of key terms, spelling, and grammar.
	Emerging Proficiency
FS2	The student's knowledge of design principles and techniques, and skills is progressing, showcasing a growing level of task completion. Their attitude is shifting towards more consistent engagement and responsibility. While they are starting to apply their knowledge effectively in designing, making, and communicating, there is still room for growth. Work habits are improving, with more consistent task completion and heightened safety consciousness. They are demonstrating a willingness to read and a gradual enhancement in spelling and grammar.
	Entry Level
FS1	At this stage, the student possesses a foundational but rudimentary understanding of design and technology concepts. Their knowledge is at a basic level, with a limited grasp of key principles. Their attitude towards tasks is marked by a willingness to engage but lacks consistency, leading to some sporadic task completion. Safety awareness is emerging, and they are in the initial stages of developing responsible work habits. Organisational skills are in the early stages of development, and they show a growing willingness to read and understand key terms, although spelling and grammar may need improvement.
	Student is working at the lower end of entry level 1. Evidence will show that they have demonstrated some engagement with some content above. Achieved some credit across elements of the six grade descriptors in the unit of work and achieved credit in some learning outcomes for the project. Work including design tasks and practical tasks will often be largely unfinished or heavily assisted. Spelling and grammar and written work may need improvement.

Design & Technology: Food

BFS	To achieve Beyond Foundation Stage , students' work will show that they have securely met all the statements within the grade FS5 descriptor, with exceptional performance in most or all aspects. This could include more detail, greater accuracy, independent work, excellent drawing communication and presentation, extension questions, challenge activities, coaching others, super curriculum work, LORICA points for all areas and any other evidence that you the teacher believes justifies this judgement.
	Can demonstrate excellent understanding of the Eatwell Guide including macro and micro nutrients considering the effect of excess and deficiencies.
	Can demonstrate and recall excellent understanding of food hygiene and safety including key bacterial growth temperatures.
	Can demonstrate excellent understanding of food provenance, international cuisine and can adapt diets for several different specific needs.
	An excellent awareness of ethical issues surrounding food and recognises several practical steps that can be taken to reduce the impact on the environment.
FS5	Can demonstrate detailed planning skills which include the whole process of making a dish. The plan shows knowledge of health and safety, quality control and contingencies.
	Can independently and confidently prepare and cook a range of dishes.
	Can use equipment safely and with dexterity.
	Dishes produced show an excellent standard of presentation and quality control.
	Can demonstrate a very good understanding of the Eatwell Guide including macro and micro nutrients considering the effect of
	excess and deficiencies.
FS4	Can demonstrate and recall a very good understanding of food hygiene and safety.
	Can demonstrate a very good understanding of food provenance, international cuisine and can adapt diets for specific needs.

	A very good awareness of ethical issues surrounding food and recognises a number of practical steps that can be taken to reduce the impact on the environment.
	Can demonstrate very good planning skills which include the whole process of making a dish. The plan shows knowledge of health and safety and quality control.
	Can independently prepare and cook a range of dishes.
	Can use equipment safely and with confidence.
	Dishes produced show a very good standard of presentation and quality control.
	Can demonstrate a good understanding of the Eatwell Guide including macro and micro nutrients.
	Can demonstrate and recall a good understanding of food hygiene and safety.
	Can demonstrate good understanding of food provenance, international cuisine and can adapt diets for some specific needs.
	A good awareness of ethical issues surrounding food and recognises practical steps that can be taken to reduce the impact on the environment.
FS3	Can demonstrate a good level of planning skills which include the whole process of making a dish. The plan shows knowledge of health and safety and quality control
	Can independently prepare and cook a range of dishes.
	Can use equipment safely and with some confidence.
	Dishes produced show a good standard of presentation and quality control.
	Can demonstrate an understanding of the Eatwell Guide including some key nutrients.
FS2	Can demonstrate and recall an understanding of food hygiene and safety, support may be required during a practical.
102	Can demonstrate an understanding of food provenance, international cuisine and with some support can adapt diets for specific needs.

	Has awareness of ethical issues surrounding food and recognises some practical steps that can be taken to reduce the impact on the environment.
	Can demonstrate planning skills occasionally with support.
	The plan shows some knowledge of health and safety and quality control.
	Can prepare and cook a range of dishes occasionally with support.
	Can use equipment safely.
	Dishes produced show some consideration of presentation and quality control.
	Can demonstrate some understanding of the Eatwell Guide including some key nutrients.
	Can demonstrate and recall some understanding of food hygiene and safety, support will be required during a practical.
	Can demonstrate some understanding of food provenance, international cuisine and with support can adapt diets for specific needs.
	Has awareness of some ethical issues surrounding food and recognises basic practical steps that can be taken to reduce the impact on the environment.
FS1	Can demonstrate some planning skills with support.
	The plan shows some knowledge of health and safety.
	Can prepare and cook a range of dishes with support.
	Can use equipment safely.
	Dishes produced show basic consideration of presentation and quality control.

<u>Drama</u>

	Creating and Responding	Performing		
	I not only continuously give creative ideas but I am also trying to justify them, understanding how to use conventions for a purpose and try different approaches, showing creative originality	I can use my vocal, physical & movement skills , & have the ability to use a range of vocal features confidently & with ease , demonstrating versatility as a performer		
BFS	I am confident in directing my peers and leading a group to create original work, trying new ideas and conventions. Because of my input, my peers have also made progress	When performing as a character, I do so with energy and commitment . I have considered many attributes of my role to create a developed and rounded character		
	I continuously participate in class/group discussions and often use drama terminology within my responses. I am also starting to be able to analyse and evaluate my own work/work of my peers	I can communicate very effectively to the audience and with other performers through use of clarity and eye contact. My focus when performing is sustained and creates an effective impact on the audience		
5	I not only give creative ideas but I am also trying to justify them, understanding how to use theatrical conventions or techniques for a specific purpose	I can use my vocal and movement skills, demonstrating the ability to use a range of features confidently and with ease		
FS5	I am confident in directing my peers and leading a group to create original work, trying new ideas and conventions or techniques	When performing as a character, I do so with energy and commitment . I demonstrate a clear understanding of the role I am playing through my vocal and physical choices		

	I continuously participate in class/group discussions and often use drama terminology within my responses	I can communicate effectively with the audience and with other performers through use of clarity and eye contact. I have presence on stage.	
	I am confident in offering creative ideas to show my knowledge of drama and do so continuously	I can use my vocal and movement skills, demonstrating the ability to use a range of features to make my character interesting	
FS4	I fully engage in the creative process and work well with others, often showcasing leadership skills	When performing as a character, I do so with energy and commitment . There is often a clear understanding of the role I am playing	
	I continuously participate in class/group discussions, showing my knowledge and understanding of drama	I can communicate clearly to the audience and with other performers through use of clarity and eye contact demonstrating audience awareness	
	I can give creative ideas and show my knowledge of drama skills and techniques	I can use my vocal and movement skills , demonstrating the ability to use appropriate tone, pitch, clarity, projection and pace / gesture, facial expression, gait and posture	
FS3	I engage in the creative process and work well with others, sometimes showcasing leadership skills	When performing as a character, I am developing my understanding of the role I am playing	
	I often participate in class/group discussions, showing my knowledge and understanding of drama	I am starting to communicate clearly to the audience and with other performers through use of clarity and eye contact.	

FS2	I am able to give some basic ideas that show my knowledge of drama skills and techniques	I can use vocal and movement skills on a basic level e.g. some projection, clarity and tone / some use of facial expression and gesture.		
	I engage in the creative process and I am building my confidence to be able to take on leadership roles when working in groups	When performing as a character, I demonstrate some understanding of the role I am playing through my vocal and physical choices		
	I participate in class/group discussions, answering questions about performance work with direction from the teacher	I can communicate basic characters to the audience and with other performers through use of clarity and eye contact & demonstrate audience awareness		
FS1	I can sometimes give ideas that show my knowledge of drama skills & techniques	I am working towards using my voice & facial expression confidently when performing		
	I sometimes collaborate well with others during the creative process	When performing as a character, I try to change my voice & movement to suit the role		
	I am developing my confidence when participating in class/group discussions	I try to communicate clearly to the audience and with other performers through use of clarity and eye contact & demonstrate audience awareness		

<u>English</u>

	Foundation Stage Level Descriptors READING						
FS1 – Simple	FS2 – Some	FS3 – Secure	FS4 - clear	FS5 – developed	BFS - confident		
Students are occasionally able to meet the learning intentions but inconsistently and not always successfully, even with significant scaffolding/support.	Students are sometimes able to meet the learning intentions, still with reliance on scaffolding/support, and with some inconsistency.	Students are mainly able to meet the learning intentions but may occasionally need some scaffolding/support, although this is no longer relied upon.	Students are clearly able to meet the learning intentions, usually (and mainly) without any reliance on scaffolding/support.	Students are consistently and independently able to meet the learning intentions, always without scaffolding/support.	Students are confidently and convincingly able to meet (and go beyond) the learning intentions without any scaffolding/support.		
Simple, limited	Some understanding	Secure understanding	Clear understanding	Developed, detailed	Confident, perceptive		
understanding with	mostly demonstrated,	demonstrated accurately,	demonstrated, mainly	understanding	understanding		
misconceptions frequently	sometimes inaccurately	with less support, and few	without support or	demonstrated, always	demonstrated and with		
evident.	and/or inconsistently.	(if any) errors.	error.	without support and with a growing confidence.	convincing independence.		
Simple retrieval of explicit	Some retrieval of explicit	Secure response to	Clear response to				
ideas, although this is	ideas, often with support	explicit and implicit ideas,	explicit and implicit	Developed, detailed	Confident response to		
inconsistent and	but with some errors, with	almost always with	ideas within a text,	response to explicit and	explicit and implicit		
occasionally with errors.	some emerging awareness	limited support and with	mainly without	implicit ideas, always	ideas beyond what has		
	of implicit ideas.	a growing sense of	support or error.	without support, and with	been taught in the		
Simple/no inference		accuracy/independence.		a growing confidence.	classroom.		
despite heavy support,	Some inference emerging,		Clear inferences				
with frequent errors, and	although always supported	Secure inference evident	made, mainly without	Developed, sustained	Confident, perceptive		
without any awareness of	and with some errors.	with (limited) support,	support or error, and	inferences made without	inferences that consider		
context.	Some occasional	few (if any) errors, and	with a clear	support and with an	a multitude of		
	consideration of context	with an emerging	consideration of	emerging consideration of	contextual factors.		
Simple selection textual	but with some errors.	consideration of context.	context.	context, both inside and			
reference, although heavily				outside of the text.	Confident, convincing		
supported and with	Some selection of textual	Secure selection and	Clear, relevant		selection of textual		
frequent errors.	references, although	embedding of textual	selection of textual	Developed selection of	references, integrated		
	always supported and with	references, with limited	references, usually	textual references,	seamlessly and		
Simple or no comments on	some errors.	support and few errors.	without any support	embedded smoothly	confidently to articulate		
language/structure despite			or error, and	independently and mainly	a clear idea.		
support, and with frequent	Some comments on	Secure relevant	embedded with a	with consistency.	Confidont datailad		
errors.	language/structure,	comments on	growing confidence.	Developed enablished	Confident, detailed		
	although always supported	language/structure, with		Developed analysis of	analysis of		
	and with some errors.	some (limited) support	Clear explanation of	language/structure, mainly	language/structure,		
		and few (if any) errors.	language/structure,		considering multiple		

Simple and limited/no	Some awareness of voice,		usually without (or	with consistency and some	layers and meanings
awareness of voice, despite	although always supported	Secure ability to track	with very little)	confidence.	with convincing
scaffolding.	and with some errors.	voice/ideas with some	support or error.		independence.
		(limited) support and few		Developed tracking of	
Simple and limited/no	Some awareness of	(if any) errors.	Clear ability to track	voice/ideas, with some	Perceptive tracking of
awareness of writer's	writer's purpose, although		voice/ideas, usually	consideration of context.	voice/ideas with some
purpose, despite	still fairly limited and	Secure awareness of	without (or with very		confidence and
scaffolding.	always with support.	writer's purpose with	little) support or error.	Developed understanding	awareness of
Simple/no awareness of		some support (and		of writer's purpose, always	subtleties/nuances.
how texts are linked to one	Some awareness of how	occasional	Clear understanding of	without support and with	
another by their shared	texts are linked to one	misconception).	writer's purpose,	some growing conviction	Confident, perceptive
universal, timeless themes.	another by their shared		usually without (or	and nuance.	understanding of
	universal, timeless themes	Secure, explained	with very little)		writer's purpose, both
At the bottom of FS1, a	but without any	awareness of how texts	support or error.	Developed ability to make	as a piece of
student might:	independence and with	are linked to one another		independent	entertainment and as a
	some misconceptions/	by their shared universal,	Clear ability to make	connections/comparisons/	social commentary,
Be unable to read the text	errors evident.	timeless themes, with	connections/links	links between texts across	articulated with
without significant support.		very few (if any)	between texts across	the breadth of the	conviction and nuance.
		misconceptions.	the curriculum	curriculum, with a	
Articulate words			without support and	developed awareness of	Confident ability to
phonetically, rather than as			with a clear, emerging	the intent of the writer and	make independent
a complete unit.			awareness of the	the context within which	connections/
			writer's intent being	the text was written.	links between texts
Struggle to comprehend			influenced by the		across the breadth of
the text, despite extensive			context within which		the curriculum, always
scaffolding and support.			the text was written.		convincingly articulated,
					and with a confident
Have no awareness of					awareness of the intent
there being a writer					of the writer and the
constructing a text.					context within which
					the text was written.
Have no awareness of any					
language devices being					
chosen.					
Struggle to refer to a					
specific moment in the text					

to support their idea, even			
verbally.			

Handwriting may be almost illegible, possibly to hide misspelled words.	Some understanding of verb agreements when matching the subject and verb of a sentence in tense,			sentence in tense, aspect, and mood.
1	aspect, and mood.	2		

ENGLISH: SPOKEN LANGUAGE

Talking to Others (A011)	Talking with Others (A012	Talking within role-play and drama (AO13)	Studying Spoken Language (AO14)
Talk in purposeful and imaginative ways to explore ideas and feelings, adapting and varying structure and vocabulary according to purpose, listeners and content	Listen and respond to others, including in pairs and groups, shaping meanings through suggestions, comments and questions	Create and sustain different roles and scenarios, adapting techniques in a range of dramatic activities to explore texts, ideas and issues	Understand the range and uses of spoken language, commenting on meaning and impact in both written work and discussion

(Beyond FS Level) Talk is conducted in an exceptional way

(FS5) Talk is conducted in an effective way

(FS4) Talk is conducted in a consistent way

(FS3) Talk is conducted in a competent way

(FS2) Talk is conducted in an inconsistent way

(FS1) Talk is conducted in a limited way

	ENGLISH: WRITING					
FS1 – Simple	FS2 – Some	FS3 – Secure	FS4 - Clear	FS5 – Developed	BFS - Confident	
Students are occasionally able to meet the learning intentions but inconsistently and not always successfully, even with significant scaffolding/support.	Students are sometimes able to meet the learning intentions, still with reliance on scaffolding/support, and with some inconsistency.	Students are mainly able to meet the learning intentions but may occasionally need some scaffolding/support, although this is no longer relied upon.	Students are clearly able to meet the learning intentions, usually (and mainly) without any reliance on scaffolding/support.	Students are consistently and independently able to meet the learning intentions, always without scaffolding/support.	Students are confidently and convincingly able to meet (and go beyond) the learning intentions without any scaffolding/support.	
Simple, limited	Some clarity in	Secure communication and	Clear communication and	Developed communication	Confident	
communication that, at	communication, with some	clarity, with less reliance on	clarity, mainly without any	and clarity, always without	communication,	
times, lacks clarity.	inconsistences still evident.	scaffolding/support.	reliance on scaffolding/ support.	scaffolding/support.	constructed with flair, sophistication, and	
Simple (or no) awareness	Some awareness of	Secure awareness of		Developed understanding	executed with	
of writer's purpose.	purpose but not always executed successfully.	purpose, with occasional errors in execution.	Clear understanding of purpose, executed with a	of purpose, executed with a sustained clarity.	convincing clarity.	
Simple attempts made to	-		growing clarity and control.	-	Confident, convincing	
establish a strong	Some attempts made to	Secure attempts made to		Developed, consistent	execution of purpose	
voice/character/narrator,	establish a strong	establish a strong	Clear ability to establish a	ability to sustain a	used to both empower	
not always successfully.	voice/character/narrator,	voice/character/narrator,	strong voice/character/	successfulstrong	the writer and	
	with some success.	mainly with success.	narrator with success.	voice/character/narrator.	manipulate the reader.	
Simple or limited						
vocabulary used with	Some use of lower-	Secure use of lower-	Clear use of lower-frequency	Developed use of low-	Confident, consistent	
varying degrees of success	frequency vocabulary but	frequency vocabulary, with	vocabulary, with little to no	frequency vocabulary for	ability to sustain a strong	
	with a reliance on	less reliance on vocabulary	reliance on vocabulary banks	effect, always without any	voice/character/	
Simple control over	vocabulary banks provided.	banks provided.	provided.	reliance on	narrator, tailored	
sentence formation,				scaffolding/support.	convincingly to task.	
limited to writing mainly in	Some sense of simple	Secure awareness of	Clear variation in sentence			
simple SVO sentences with	sentence formation using	sentence formation using	functions, using simple,	Developed variation in	Confident, independent	
consistent errors (missing	SVO, with some errors still	SVO.	compound, and complex	sentence functions, using	control of low-frequency	
subject/verb/object).	evident.		sentences successfully.	simple, compound, and	vocabulary, used	
		Secure awareness of		complex sentences	deliberately to both	
Simple use of structure,	Some awareness of	sentence functions, using	Clear and conscious	successfully and	position and manipulate	
either using	sentence functions using	simple, compound, and	paragraph structure used to	independently for a	the reader.	
limited/sporadic/no	simple and compound	complex sentences to	achieve a clear effect.	deliberate effect.		
paragraphing.	sentences to varying	varying degrees of success.			Confidently varied	
	degrees of success, but				sentence functions,	

Simple to no awareness of	with some errors.	Secure paragraph structure	Clear whole-text structure	Developed understanding	constructed successfully
basic spelling patterns,		created, sometimes with	built for effect and with less	of how clausal structures	and independently to
with spelling errors being	Some conscious paragraph	reliance on sentence	reliance on	can be constructed to	convincingly achieve a
more consistent than	structure used, not always	starters.	scaffolding/support.	manipulate the way a	desired effect(s).
occasional.	successfully, and with		Clear awareness of both	reader thinks/feels/	
	significant reliance on	Whole-text structure	basic and challenging	responds.	Confident use of
Simple to no awareness of	sentence starters.	beginning to emerge that	spelling patterns, with any		structure, both
basic punctuation, such as		securely transitions writing	minor errors not impacting	Developed and cohesive	sentence-level and
full stops.	Some awareness of the	from one idea to the next	on clarity.	whole-text structure built	whole-text, to
	need for a whole-text	with some support.	-	deliberately for effect and	deliberately and
Simple to no awareness of	structure (probably limited		Clear control over both basic	without the use of any	convincingly position and
capitalisation, either at the	to two paragraphs),	Secure awareness of basic	and advanced punctuation,	scaffolding/support.	manipulate the reader.
start of a new sentence or	executed with some	and more challenging	including semi-colons, with		
for all proper nouns.	success using sentence	spelling patterns, with	very few errors.	Developed awareness of	Confident awareness of
	frames.	occasional errors in the		both basic and challenging	both basic and
Simple/limited		more challenging words.	Clear, emerging awareness	spelling patterns without	challenging spelling
understanding of verb	Some awareness of basic		that punctuation can be	any errors or support.	patterns without any
agreements when	spelling patterns, with	Secure control over basic	used to manipulate the way		error.
matching the subject and	spelling errors being more	punctuation, such as full	that a writer responds, with	Developed control over	
verb of a sentence in	occasional than consistent.	stops and commas, with	some clear attempts made	both basic and advanced	Confident control over
tense, aspect, and mood.		some emerging awareness	to do so.	punctuation, including	all types of basic and
	Some control over basic	of more advanced		semi-colons and colons, to	advanced punctuation,
At the bottom of FS1, a	punctuation, such as full	punctuation.	Clear awareness of	deliberately and	including semi-colons,
student might:	stops and commas, with	-	capitalisation at the start of	consciously manipulate the	colons, and
2	some errors evident	Secure awareness of	a new sentence or for all	way a reader thinks/feels/	parenthesise, to
Spell words phonetically.	(missing full stops, commas	capitalisation at the start of	proper nouns, with no	responds to a text.	confidently and
	splicing, run-on sentences).	a new sentence or for all	capitalisation errors present.		convincingly manipulate
Consistently make high-		proper nouns.		Developed understanding	the way a reader
frequency word errors (for	Some awareness of		Clear understanding of verb	of verb agreements when	thinks/feels/
example, 'wot', 'thay').	capitalisation at the start of	Secure understanding of	agreements when matching	matching the subject and	responds to a text.
	a new sentence or for all	verb agreements when	the subject and verb of a	verb of a sentence in tense,	
Simple/limited	proper nouns, with some	matching the subject and	sentence in tense, aspect,	aspect, and mood.	Confident understanding
understanding of how to	inconsistencies.	verb of a sentence in tense,	and mood.		of verb agreements
proof-read, demonstrating		aspect, and mood.			when matching the
a lack of awareness.					subject and verb of a

Geography

	Knowledge and understanding	Interactions and relationships	Drawing conclusions	Geographical skills
BFS	Demonstrate relevant and broad knowledge , understanding and application of geographical information and issues.	Demonstrate strong understanding of some complex interactions and interrelationships between people and the environment and between geographical phenomena.	Construct convincing arguments with occasional complexities to reach reasoned judgements with some substantiation .	Use a range of geographical skills and techniques effectively with some evaluation.
FS5	Demonstrate mostly accurate and appropriate knowledge, understanding and application of geographical information and issues.	Demonstrate clear understanding of interactions and interrelationships between people and the environment and between geographical phenomena.	Construct coherent arguments to draw conclusions supported by evidence .	Use a range of geographical skills and techniques accurately, showing understanding of their purpose.
FS4	Demonstrate some accurate and appropriate knowledge, understanding and application of geographical information and issues.	Demonstrate some understanding of interactions and interrelationships between people and the environment and between geographical phenomena.	Construct some coherent arguments to draw conclusions supported by evidence .	Use a basic range of geographical skills and techniques with some accuracy, showing some understanding of their purpose.

FS3	Demonstrate geographical knowledge and understanding with more gaps and inaccuracies; language is generally basic, but some geographical terms are used.	Offer some understanding of interactions and relationships between people and the environmental, and this will vary in depth.	Construct simple conclusions , with some brief evidential support .	Use a basic range of geographical skills and techniques with some accuracy and limited understanding of their purpose.
FS2	Demonstrate basic knowledge , understanding and application of geographical information and issues.	Demonstrate basic understanding of aspects of interactions and interrelationship s between people and the environment and between geographical phenomena.	Make straightforward comments with some reference to evidence.	Use some basic geographical skills and techniques with limited accuracy.
FS1	Demonstrate limited knowledge, understanding and application of geographical information and issues.	Demonstrate limited understanding of aspects of interactions and interrelationships between people and the environment and between geographical phenomena.	Give basic comments with little or no reference to evidence.	Attempts to use some basic geographical skills and techniques with limited accuracy.

<u>History</u>

	Causation	Change and continuity	Historical evidence	Historical interpretations
BFS	Signpost 4: Unintended consequences	Signpost 4: Complexity of change	Signpost 5: Sources in context Historical evidence must be	Signpost 4: Interpretations in context
	HISTORICAL ACTORS cannot always predict the effects of their own actions leading to UNINTENDED CONSEQUENCES. These unintended consequences can also lead to changes	Change and continuity are not a single process. There are many FLOWS of change and continuity operating at the same time. Not all FLOWS go in the same direction	understood on its own terms. This means thinking about the CONTEXT in which the source was created and the conditions and views that existed at the time.	Historical interpretations must be understood on their own terms. This means thinking about the CONTEXT in which they were created, the conditions and views that existed at the time, and what impact these factors might have on the final interpretation.
FS5	Signpost 3: Personal and	Signpost 3: Flows of		Signpost 3: Evaluating
FS4	contextual factors Historical changes happen because of two main factors: the actions of HISTORICAL ACTORS and the CONDITIONS (social, economic etc.) which have influenced those actors.	continuity and change Change is a process which varies over time. Change can be described as a FLOW in terms of its PACE and EXTENT and can be described in terms of TRENDS and TURNING POINTS.	Signpost 4: Evaluating sources Working with evidence begins before the source is read by thinking about how the AUTHOR, intended AUDIENCE and PURPOSE of an historical source might affect its WEIGHT as evidence in relation to a particular question. Signpost 3: Source utility Historical evidence has multiple uses. The UTILITY of a piece of	interpretations The APPROACH of an author must always be considered. This means considering their VIEWPOINT, PURPOSE, AUDIENCE and the EVIDENCE chosen to build their interpretation and what impact this might have on the final interpretation.

			to the specific enquiry or the	
			questions being asked.	
FS3	Signpost 2: Influence of	Signpost 2: Interweaving	Signpost 2: Cross-referencing	Signpost 2: Drawing
FS2	factors	continuity and change	sources	inferences from
	Different causes have	Change and continuity are	Historical evidence must be	interpretations
	different LEVELS OF	INTERWOVEN and both can be	CROSS-REFERENCED so that	It is possible to draw
	INFLUENCE. Some causes	present together in history.	claims are not made based on single	INFERENCES from
	are more important than	CHRONOLOGIES can be used	pieces of evidence. CROSS-	interpretations of the past,
	other causes.	to show change and continuity	REFERENCING means checking	just as with historical
		working together over time.	against other primary or secondary	sources. INFERENCES will
			sources.	reveal the MESSAGE of a
				particular interpretation.
FS1	Signpost 1: Causal webs	Signpost 1: Identifying	Signpost 1: Inferences from	Signpost 1: Identifying
	Change happens because	change	sources	interpretations
	of MULTIPLE CAUSES and	Past societies are not fixed:	When we write history we need to	Historical interpretations are
	leads to many different	there are changes which have	create interpretations of the past	everywhere. Every piece of
	results or consequences.	occurred spanning centuries.	based on evidence. INFERENCES	historical writing is an
	These create a WEB of	Changes in the past can be	are drawn from a variety of primary	interpretation of some sort.
	related causes and	identified by looking at	sources to create interpretations of	The past is not fixed but
	consequences.	DEVELOPMENTS between two	the past.	CONSTRUCTED through
		periods.		the process of interpretation.

MATHS

The levels below represent a 'best fit' model.

Using and applying

Pre Foundation Stage Students use mathematics as an integral part of classroom activities. They represent their work with objects or pictures and discuss it. They recognise and use a simple pattern or relationship. Students select the mathematics they use in some classroom activities. They discuss their work using mathematical language and are beginning to represent it using symbols and simple diagrams. They explain why an answer is correct.

Foundation Stage 1 Students try different approaches and find ways of overcoming difficulties that arise when they are solving problems. They are beginning to organise their work and check results. Students discuss their mathematical work and are beginning to explain their thinking. They use and interpret mathematical symbols and diagrams. Students show that they understand a general statement by finding particular examples that match it.

Foundation Stage 2 Students develop their own strategies for solving problems and use these strategies both in working within mathematics and in applying mathematics to practical contexts. When solving problems, with or without ICT, they check their results are reasonable by considering the context. They look for patterns and relationships, presenting information and results in a clear and organised way, using ICT appropriately. They search for a solution by trying out ideas of their own.

Foundation Stage 3 In order to explore mathematical situations, carry out tasks or tackle problems, students identify the mathematical aspects and obtain necessary information. They calculate accurately, using ICT where appropriate. They check their working and results, considering whether these are sensible. They show understanding of situations by describing them mathematically using symbols, words and diagrams. They draw simple conclusions of their own and explain their reasoning.

Foundation Stage 4 Students carry out substantial tasks and solve quite complex problems by independently and systematically breaking them down into smaller, more manageable tasks. They interpret, discuss and synthesise information presented in a variety of mathematical forms, relating findings to the original context. Their written and spoken language explains and informs their use of diagrams. They begin to give mathematical justifications, making connections between the current situation and situations they have encountered before.

Foundation Stage 5 Starting from problems or contexts that have been presented to them, students explore the effects of varying values and look for invariance in models and representations, working with and without ICT. They progressively refine or extend the mathematics used, giving reasons for their choice of mathematical presentation and explaining features they have selected. They justify their generalisations, arguments or solutions, looking for equivalence to different problems with similar structures. They appreciate the difference between mathematical explanation and experimental evidence. Students develop and follow alternative approaches. They compare and evaluate representations of a situation, introducing and using a range of mathematical techniques. They reflect on their own lines of enquiry when exploring mathematical tasks. They communicate mathematical or statistical meaning to different audiences through precise and consistent use of symbols that is sustained throughout the work.

Beyond Foundation Stage Students critically examine the strategies adopted when investigating within mathematics itself or when using mathematics to analyse tasks. They examine generalisations or solutions reached in an activity and make further progress in the activity as a result. They comment constructively on the reasoning and logic, the process employed and the results obtained. They explain why different strategies were used, considering the elegance and efficiency of alternative lines of enquiry or procedures. They apply the mathematics they know in a wide range of familiar and unfamiliar contexts. They use mathematical language and symbols effectively in presenting a convincing, reasoned argument. Their reports include mathematical justifications, distinguishing between evidence and proof and explaining their solutions to problems involving a number of features or variables. **Number**

Number and Algebra

Beyond Foundation Stage Students critically examine the strategies adopted when investigating within mathematics itself or when using mathematics to analyse tasks. They examine generalisations or solutions reached in an activity and make further progress in the activity as a result. They comment constructively on the reasoning and logic, the process employed and the results obtained. They explain why different strategies were used, considering the elegance and efficiency of alternative lines of enquiry or procedures. They apply the mathematics they know in a wide range of familiar and unfamiliar contexts. They use mathematical language and symbols effectively in presenting a convincing, reasoned argument. Their reports include mathematical justifications, distinguishing between evidence and proof and explaining their solutions to problems involving a number of features or variables. Number and Algebra

Pre Foundation Stage Students count, order, combine, increase and decrease quantities when solving problems in practical contexts. They read and write the numbers involved. Students count sets of objects reliably, and use mental recall of addition and subtraction facts to 10. They begin to understand the place value of each digit in a number and use this to order numbers up to 100. They choose the appropriate operation when solving addition and subtraction problems. They use the knowledge that subtraction is the inverse of addition. They use mental calculation strategies to solve number problems involving money and measures. They recognise sequences of numbers, including odd and even numbers.

Foundation Stage 1 Students show understanding of place value in numbers up to 1000 and use this to make approximations. They begin to use decim al notation, in the context of measures and money, and to recognise negative numbers in practical contexts such as temperature. Students use mental recall of addition and subtraction facts to 20 in solving problems involving larger numbers. They add and subtract numbers with two dig its mentally and numbers with three digits using written methods. They use mental recall of the 2, 3, 4, 5 and 10 multiplication tables and derive the associated division facts. They solve whole-number problems involving multiplication or division including those that give rise to remainders. They use simple fractions that are several parts of a whole and recognise when two simple fractions are equivalent. Students use their understanding of place value to mentally multiply and divide whole numbers by 10 or 100. When solving number problems, they use a range of mental methods of computation with the four operations, including mental recall of multiplication facts up to 10 x 10.

Foundation Stage 2 When solving number problems, they use a range of mental methods of computation with the four operations, including mental recall of multiplication facts up to 10 x 10 and quick derivation of corresponding division facts. They select efficient strategies for addition, subtraction, multiplication and division. They recognise approximate proportions of a whole and use simple formulae expressed in words. Students use their understanding of place value to multiply and divide whole numbers and decimals. They order, add and subtract negative numbers in context. They use and interpret coordinates in all four quadrants.

Foundation Stage 3 Students use all four operations with decimals to two places. They solve simple problems involving ratio and direct proportion. They calculate fractional or percentage parts of quantities and measurements, using a calculator where appropriate. They construct, express in symbolic form and use simple formulae involving one or two operations. They use brackets appropriately. Students order and approximate decimals when solving numerical problems. They evaluate one number as a fraction or percentage of another. They find and describe in words the rule for the next term or nth term of a sequence where the rule is linear.

Foundation Stage 4 Students order and approximate decimals when solving numerical problems and equations, using trial and improvement methods. They understand and use the equivalences between fractions, decimals and percentages, and calculate using ratios in appropriate situations. They add and subtract fractions by writing them with a common denominator. They formulate and solve linear equations with whole-number coefficients. They represent mappings expressed algebraically, and use Cartesian coordinates for graphical representation interpreting general features. When making estimates,

students round to one significant figure and multiply and divide mentally. They solve numerical problems involving multiplication and division with numbers of any size, using a calculator efficiently and appropriately.

Foundation Stage 5 Students understand the effects of multiplying and dividing by numbers between 0 and 1. They understand and use proportional changes, calculating the result of any proportional change using only multiplicative methods. They find and describe in symbols the next term or nth term of a sequence where the rule is quadratic. They use algebraic and graphical methods to solve simultaneous linear equations in two variables. Students solve problems that involve calculating with powers, roots and numbers expressed in standard form. They manipulate algebraic formulae, equations and expressions, finding common factors and multiplying two linear expressions. They sketch and interpret graphs of linear and quadratic. Students choose to use fractions or percentages to solve problems involving repeated proportional changes or the calculation of the original quantity given the result of a proportional change. They evaluate algebraic formulae or calculate one variable, given the others, substituting fractions, decimals and negative numbers. They solve inequalities in two variables. They sketch and interpret graphs of cubic and reciprocal functions, and graphs that model real situations. They solve simultaneous equations in two variables where both equations are linear. They solve problems using intersections and graphs.

Beyond Foundation Stage Students understand and use rational and irrational numbers. They determine the bounds of intervals. They understand and use direct and inverse proportion. In simplifying algebraic expressions, they use rules of indices for negative and fractional values. In finding formulae that approximately connect data, they express general laws in symbolic form. They solve simultaneous equations in two variables where one equation is linear and the other is quadratic.

Shape and Space

Pre Foundation Stage When working with 2-D and 3-D shapes, students use mathematical language to describe properties and positions. They measure and order objects using direct comparison, and order events. Students use mathematical names for common 3-D and 2-D shapes and describe their properties, including numbers of faces, edges and vertices. They distinguish between straight and turning movements, recognise angle as a measurement of turn, and right angles in turns. They begin to use everyday non-standard and standard units to measure length and mass.

Foundation Stage 1 Students classify 3-D and 2-D shapes in various ways using mathematical properties such as reflective symmetry for 2-D shapes. They use non-standard units, standard metric units of length including finding perimeters, capacity and mass, and standard units of time, in a range of contexts. They reflect simple shapes in a mirror line. They choose and use appropriate units and tools, interpreting, with appropriate accuracy, numbers on a range of measuring instruments.

Foundation Stage 2 Students use and make geometric 2-D and 3-D patterns, scale drawings and models in practical contexts. They find areas of simple shapes. They identify all the symmetries of 2-D shapes. They make sensible estimates of a range of measures in relation to everyday situations.

Foundation Stage 3 When constructing models and drawing or using shapes, students measure and draw angles to the nearest degree and use language associated with angles. They know the angle sum of a triangle and that of angles at a point. They convert one metric unit to another. They understand and use the formula for the area of a rectangle. Students recognise and use common 2-D representations of 3-D objects. They know and use the properties of quadrilaterals. They devise instructions for a computer to generate and transform shapes and paths. They understand and use appropriate formulae for areas of plane rectilinear figures and volumes of cuboids when solving problems.

Foundation Stage 4 They solve problems using angle and symmetry, properties of polygons and angle properties of intersecting and parallel lines, and explain these properties. They devise instructions for a computer to generate and transform shapes and paths. They understand and use appropriate formulae for finding circumferences and areas of circles when solving problems. They appreciate the imprecision of measurement and recognise that a measurement given to the nearest whole number may be inaccurate by up to one half in either direction. They understand and us e compound measures, such as speed.

Foundation Stage 5 Students understand and apply Pythagoras' theorem when solving problems in two dimensions. They calculate lengths, areas and volumes in plane shapes and right prisms. They enlarge shapes by a fractional scale factor, and appreciate the similarity of the resulting shapes. They determine the locus of an object moving according to a rule. Students understand and use congruence and mathematical similarity. They use sine, cosine and tangent in right-angled triangles when solving problems in two dimensions. Students sketch the graphs of sine, cosine and tangent functions for any angle. They calculate lengths of circular arcs and areas of sectors. They appreciate the continuous nature of scales that are used to make measurements.

Beyond Foundation Stage Students sketch the graphs of sine, cosine and tangent functions for any angle, and generate and interpret graphs based on these functions. They use sine, cosine and tangent of angles of any size, and Pythagoras' theorem when solving problems in two and three dimensions. They construct formal geometric proofs. They calculate the surface area of cylinders and volumes of cones and spheres.

Statistics

Pre Foundation Stage Students sort objects and classify them, demonstrating the criterion they have used. They collect data to answer questions. Students sort objects and classify them using more than one criterion. When they have gathered information to answer a question or explore a situation, students record results in simple lists, tables, diagrams and block graphs, in order to communicate their findings.

Foundation Stage 1 Students extract and interpret information presented in simple tables and lists. They construct charts and diagrams to communicate information they have gathered for a purpose, and they interpret information presented to them in this form. Students generate and answer questions that require the collection of discrete data which they record using a frequency table. They understand and use an average and range to describe sets of data. They construct and interpret simple line graphs.

Foundation Stage 2 Using technology where appropriate: students group data in equal class intervals if necessary, represent collected data in frequency diagrams and interpret such diagrams. Students understand and use the mean of discrete data. They compare two simple distributions using the range and one of the mode, median or mean. They understand and use the probability scale from 0 to 1.

Foundation Stage 3 Students interpret graphs and diagrams, including pie charts, and draw conclusions. They collect and record continuous data, choosing appropriate equal class intervals over a sensible range to create frequency tables. They construct and interpret frequency diagrams. They construct pie charts. They find and justify probabilities and approximations to these by selecting and using methods based on equally likely outcomes and experimental evidence, as appropriate. They understand that different outcomes may result from repeating an experiment.

Foundation Stage 4 They draw conclusions from scatter diagrams, and have a basic understanding of correlation. They use measures of average and range, with associated frequency polygons, as appropriate, to compare distributions and make inferences. When dealing with a combination of two

experiments, they identify all the outcomes. When solving problems, they use their knowledge that the total probability of all the mutually exclusive outcomes of an experiment is 1.

Foundation Stage 5 Students specify hypotheses and test them by designing and using appropriate methods that take account of variability or bias. They determine the modal class and estimate the mean, median and range of sets of grouped data, selecting the statistic most appropriate to their line of enquiry. They understand relative frequency as an estimate of probability and use this to compare outcomes of experiments. Students interpret and construct cumulative frequency tables and diagrams. Students estimate the median and interquartile range and use these to compare distributions and make inferences. They understand how to calculate the probability of a compound event and use this in solving problems. Students interpret and construct histograms

Beyond Foundation Stage Students understand how different methods of sampling and different sample sizes may affect the reliability of conclusions drawn. They select and justify a sample and method to investigate a population. They recognise when and how to work with probabilities associated with independent, mutually exclusive events.

Modern Foreign Languages

Speaking Component

	Communication	Spontaneity and fluency	Range and accuracy of language	Pronunciation and intonation
BFS	Gives clear information on a wide range of topics. Can develop responses in extended sequences of speech.	Sometimes reacts naturally to questions on a range of topics, although may also rely on support or prepared responses at times.	Good language with a variety of structures and vocabulary. Attempts at more complex structures are usually successful.	Good pronunciation and intonation with only occasional lapses.
	Gives and often explains opinions in more detail. Can formulate a wide range of questions including more complex language without prompting.	Delivery is generally at a reasonable pace.	There are references made to past, present and future which are sometimes successful. There may be minor errors but they do not impede comprehension.	
FS5	Gives mostly clear information on wide range of topics.	Can answer questions on a range of topics with support, or prepared responses for unfamiliar questions.	Generally good language which involves mainly simple linguistic structures and vocabulary, with some repetition.	Good pronunciation but some inconsistency at times. Often uses intonation.
	Can answer a range of questions with short responses and some extended responses.	Often adapts language to give more spontaneous responses.	Successful attempts to use more complex linguistic structures and more varied vocabulary.	Confident in applying knowledge of phonics to new words.
	Gives opinions some of which are explained in more detail.	Delivery is usually at a natural speed, although there may be	There is some success in making reference to past and future, as well as present, events.	
	Can formulate their own questions on a range of topics.	hesitancy.	There may be errors in more complex structures, but they do not generally impede comprehension.	
FS4	Gives mostly clear information about topics seen recently and	Can answer a range of questions with support, or prepared responses for unfamiliar questions.	Reasonable language with simple structures and vocabulary.	Generally good pronunciation with some inconsistency in new language.

	sometimes on a wider range of topics. Can answer questions on a range of topics with short responses. Gives opinions and often develops them. Can formulate their own questions.	Sometimes adapts language to give more spontaneous responses. Delivery is often at a natural speed, although may be slow at times.	Some attempts to use more complex structures, although not always successful. There is some success in making reference to another time frame. There may some be errors but do not usually impede communication	Able to use intonation. Often able to apply knowledge of phonics to new words.
FS3	Gives mostly clear information about different topics seen recently in class. Can usually give short responses to simple questions on a range of topics. Gives opinions and sometimes develops them with basic language. Is able to ask a range of pre-learnt questions.	Can answer a range of familiar questions with support or prepared responses. Delivery can be at a natural speed with familiar language although may be quite slow at times.	Is able to use simple structures to answer questions on a range of topics. Some variety of language, not overly reliant on the same adjectives. Beginning to use some complex structures There may be serious errors in less familiar language.	Pronunciation is clear, although there is some inconsistency. Able to use a little intonation. Sometimes able to apply limited knowledge of phonics to new words.
FS2	Usually clear when speaking about different topics seen recently in class. Can usually give short responses to simple questions without prompting. Gives basic opinions and occasionally develops them without prompting.	Can answer some familiar questions with support or prepared responses. Often hesitates and delivery may be quite slow.	Is able to use basic structures to answer questions on different topics. Limited range of vocabulary, sometimes repeats the same adjectives Few errors in familiar language.	Pronunciation is clear, although some words may be anglicised.

	Is able to ask short pre-learnt questions.			
FS1	Usually clear if speaking about a topic seen very recently in class. Can usually give short responses to simple questions when prompted.	Can answer basic questions with considerable support or prepared responses. May hesitate at length and delivery	Is able to use some basic structures and phrases to answer familiar questions. Very limited range of vocabulary,	Pronunciation is usually clear, although there may be a delay.
	Uses basic opinion phrases when	is usually quite slow.	often repeats the same adjectives and phrases.	
	prompted.			
			Basic errors can impede communication.	
Pre- FS	Sometimes clear in short answers.	Can give short basic answers with support or prepared responses.	Is able to use very short basic structures to answer some	Pronunciation can be understood in single words.
	Can sometimes give very short		questions.	
	responses to simple questions.	Relies entirely on support to answer		
		questions.	Repetition of the same adjectives	
	Can give a basic opinion when prompted.		and phrases.	

Writing Component

	Sentences	Accuracy and Communication	Variety of Language
BFS	Longer coherent texts on a range of topics.	roduces writing which is accurate, with rare preses when using more complex structures.	Manipulates language to narrate, inform, interest or convince a reader of their ideas and
	Transferring knowledge from prior topics.		points of view.
			Occasionally uses a range of less common vocabulary and complex linguistic structures as indicated in the specification.

FS5	Full sentences and short paragraphs. Longer texts on a range of familiar topics.	Produces writing which is accurate when using a wider variety of structures.	Variety of ideas, opinions and adjectives, some complex structures.
		There may be some major errors in more complex structures.	Common, familiar language to narrate events, present facts and express ideas and opinions with minimal ambiguity.
		A lot of information is communicated clearly.	A range of common vocabulary and linguistic structures with the occasional more complex linguistic structures as indicated in the specification.
			Reference to three time frames, which are largely successful.
FS4	Full sentences and short paragraphs on a range of familiar topics.	Produces writing which is accurate when using a wider variety of structures.	Common, familiar language to narrate events, present facts and express ideas and opinions with some ambiguity.
		Minor errors when attempting a wider variety of structures.	A range of common vocabulary.
		Major errors in more complex structures.	A range of complex language – including more than one time frame.
		A lot of information is communicated.	
FS3	Full sentences, which are sometimes extended, on a range of familiar topics.	Produces writing which is accurate when using familiar language.	A range of common, familiar language with more frequent ambiguity.
		Some major and minor errors when attempting a wider variety of structures.	A range of common vocabulary.
		Quite a lot of messages are communicated.	Some complex language.
FS2	Short sentences on a range of familiar topics.	Produces writing which is reasonably accurate when using familiar language.	A limited range of common, familiar language to present simple facts, ideas, and points of view.
		Some messages are communicated.	Uses a limited range of common vocabulary.
			Attempts at longer sentences.

FS1	Very short sentences on a limited range of	Legible but lots of errors.	Repetitive, simple, limited.
	topics.		
		A few messages are communicated.	
Pre-	Single words, missing words in whole sentences.	Some words are communicated.	
FS			
FS			

<u>Music</u>

Assessment Objective One: Performing

BFS	Perform music with technical challenges, mostly demonstrating fluency and sensitivity
FS5	Perform music with some technical challenges broadly fluently with some sensitivity
FS4	Perform music with limited technical challenges, showing some fluency and sensitivity
FS3	Perform music with limited technical challenges Fluency may be inconsistent
FS2	Perform simple pieces with limited fluency and sensitivity

Assessment Objective Two: Composing

BFS	Compose using a range of musical elements with competence, demonstrate, accurate knowledge of a range of musical elements, contexts and language
FS5	Compose using a range of musical elements creating musical ideas with some success
FS4	Compose using a narrow range of musical elements, creating some successful musical ideas
FS3	Composition relies upon a restricted use of musical elements which lack effective development
FS2	Compose using a range of musical elements, creating musical ideas with some appeal and limited development

Assessment Objective Three: Listening (Knowledge)

Assessment Objective Four: Appraising (Skill)

BFS	Demonstrate, accurate knowledge of a range of musical elements, contexts and language Evaluate music using musical terminology accurately
FS5	Demonstrate mostly accurate knowledge of a range of musical elements, contexts and language Evaluate music using musical terminology appropriately
FS4	Demonstrate, through aural identification, mostly accurate knowledge of some musical elements, contexts and language Evaluate music to make some judgements, sometimes using musical terminology
FS3	Knowledge of some musical elements, contexts and language is mostly accurate with some errors Evaluation uses appropriate terminology with minor errors judgements are not always supported
FS2	Demonstrate, through aural identification, some knowledge of musical elements, contexts and language Evaluate music to produce simple reflections with inconsistent use of musical terminology

Physical Education

Please find below a generic assessment criteria used in KS3 PE lessons. There are individual activity specific assessment criteria which go in to more detail that students will become more familiar with in lessons.

r	
BFS	 Able to understand and explain all safety requirements for physical activity
	 Has an extended range of knowledge around the activity they are participating in; using the correct terminology in group and class discussions
	 Shows a very good level of fitness regardless of the activity • Provides complex feedback using the correct terminology
	 Understand how antagonistic muscles contraction occurs and can give examples linking movements at the main joints at work during physical activity
	 Can apply understanding of a range of components of fitness to a wide variety of sports
FS5	 Able to understand and explain all safety requirements for physical activity
	 Has a developed a range of knowledge around the activity they are participating in using the correct terminology effectively. Able to show a good level of fitness regardless of the activity.
	 Able to provide recommendations to improve performance through adapted exercises.
	 Able to name the agonist muscles at work during different movements in physical activity
	 Understand how to improve components of fitness relevant to their sports
FS4	 Able to understand and explain a variety of safety requirements when performing physical activity
	 Has a broad range of knowledge around the terminology used in the activity they are participating in
	 Able to perform competently showing a good level of fitness
	 Able to provide feedback to improve a peer's performance
	 Able to name the antagonistic pairs needed when exercising
	Able to describe how each component of fitness is important to the sport they are taking part in
FS3	 Understand a variety of safety requirements for physical activity
	 Understands the use of basic terminology and when it may be appropriate within a session
	Demonstrates a competent level of fitness
	 Able to identify their own areas of strength and development.
	 Able to identify types of movement at a joint used when exercising
	 Able to identify components of fitness needed in the activity they are taking part in
FS2	 Understand the basic safety requirements for physical activity

	 Can identify basic terminology when working related to the activity they are taking part in
	 May need support when using the equipment
	 Able to show a basic level of fitness in performance
	 Can identify strengths and areas to develop within a peer's performance
	 Able to recall the muscles and components of fitness important for the activity they are taking part in
FS1	Able to recall basic safety rules for physical activity
	Can recall basic terminology for the activity they are taking part in
	Needs support to use the equipment
	 Can make basic statements about a peers' performance.
	Can recall the names of some of the basic muscles and components of fitness used in the activity they are taking part in
Pre-	Limited understanding of safety involved in physical exercise.
FS	Cannot recall basic terminology
	 Does not show ability to use equipment safely
	Unable to work without support
	Unable to evaluate peer performances.
	Unable to remember names of muscles or components of fitness without prompting

Science: Biology

BFS	I demonstrate both breadth and depth of knowledge and understanding of organisms, their behaviour and the environment. I apply this effectively in my descriptions and explanations, for example; explaining the advantage of different forms of chlorophyll for photosynthesis. I can explain why different types of cells contain different organelles. For example, the need for muscle cells to contain many mitochondria. I interpret, evaluate and synthesise data, from a range of sources in a range of contexts, and apply my understanding to a wide range of biological systems. I demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence gathering, for example in the study of global climate change through manipulating data to identify trends and suggest correlation between data. I describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts, such as addressing problems arising from global climate change, explaining in detail the impact on environment, economic and social issues arising.
FS5	I demonstrate extensive knowledge and understanding related to organisms, their behaviour and the environment. I use and apply this effectively in my descriptions and explanations, identifying links between topics, for example relating cellular structure of organs to their associated life processes and how organ systems work together for the functioning of the human body for example the circulatory and respiratory systems. I interpret, evaluate and synthesise data from a range of sources and in a range of contexts, for example biodiversity. I show I understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed. I can explain how scientific ideas have changed, based on experimental evidence. I can describe and explain the importance of a wide range of applications and implications of science, such as relating photosynthesis and respiration to the cycling of carbon.
FS4	I can describe a wide range of processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology and sequencing a number of points, for example recalling the word equation for respiration and describing the stages of eutrophication. I can make links between different areas of science in their explanations. I can apply and use more abstract knowledge and understanding, in a range of contexts, such as inherited and environmental variation. I can explain the use of enzymes in digestion and give an example of an enzyme in the human body. I can describe how earbor eap mays between living ergentiant and the etgendence.

how carbon can move between living organisms and the atmosphere. I can explain how evidence supports some accepted

	scientific ideas, such as the structure and function of cells. I can explain, using abstract ideas where appropriate, the importance
	of some applications and implications of science for example the implication of overuse of pesticides and bioaccumulation.
FS3	
	I can describe processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology, for example simple cell structure and function. I can use the word equation for photosynthesis and respiration. I take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as environmental factors affecting the distribution of organisms in habitats. I can describe how a model lung can explain the mechanism of breathing and its importance for providing a reactant needed for respiration. I can apply and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. I can identify the different organs within an organism and use them to explain the different organ systems and their importance. I can describe some evidence for some accepted scientific ideas, such as the causes of variation between living things for example; the research done by Watson and Crick. I can explain the importance of some applications and implications of science, such as the use of selective breeding,
FS2	I can describe the processes and phenomena related to organisms, their behaviour and the environment, drawing on abstract ideas and using appropriate terminology, for example the main functions of plant and animal organs and how these functions are essential and give examples of organ systems which could include; the circulatory, respiratory and digestive system for animals and the main organs of a flowering plant related to reproduction. I can explain processes and phenomena, in more than one step or using a model. I can apply and use knowledge and understanding in familiar contexts, such as different organisms being found in different habitats because of differences in environmental factors, for example give a range of reasons why a camel can live in a hot environment and a polar bear to live in a cold environment. I can describe applications and implications of science, such as solving some of the health problems that arise due to malnutrition.
FS1	I can describe some processes and phenomena related to organisms, their behaviour and the environment, drawing on scientific knowledge and understanding and using appropriate terminology, for example using food chains to describe feeding relationships in terms of transfer of energy between plants and animals in a habitat and plants requiring sunlight as a producer in order to be the source of chemical energy for other organisms for respiration. I can recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things.

Pre-
FSI can use my knowledge about living things to describe the basic conditions [for example, a supply of food, water, air, light] that
animals and plants need in order to survive. I recognise that living things grow and reproduce through the study of plant, animal
reproduction. I can name the main organs involved in plant and animal reproduction. I can sort living things into groups, using
simple features. I can describe the basis for my groupings [for example, number of legs, shape of leaf], identifying objects as
living or non-living using MRSGREN. I recognise that different living things are found in different places [for example, ponds,
woods]. I can use my knowledge and understanding of basic life processes [for example, growth, reproduction] when I describe
differences between living and non-living things.

Science: Chemistry

BFS	I demonstrate both breadth and depth of knowledge and understanding of organisms, their behaviour and the environment. I apply this effectively in my descriptions and explanations, for example; explaining the advantage of different forms of chlorophyll for photosynthesis. I can explain why different types of cells contain different organelles. For example, the need for muscle cells to contain many mitochondria. I interpret, evaluate and synthesise data, from a range of sources in a range of contexts, and apply my understanding to a wide range of biological systems. I demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence gathering, for example in the study of global climate change through manipulating data to identify trends and suggest correlation between data. I describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts, such as addressing problems arising from global climate change, explaining in detail the impact on environment, economic and social issues arising.
FS5	I demonstrate extensive knowledge and understanding related to organisms, their behaviour and the environment. I use and apply this effectively in my descriptions and explanations, identifying links between topics, for example relating cellular structure of organs to their associated life processes and how organ systems work together for the functioning of the human body for example the circulatory and respiratory systems. I interpret, evaluate and synthesise data from a range of sources and in a range of contexts, for example biodiversity. I show I understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed. I can explain how scientific ideas have changed, based on experimental evidence. I can describe and explain the importance of a wide range of applications and implications of science, such as relating photosynthesis and respiration to the cycling of carbon.
FS4	I can describe a wide range of processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology and sequencing a number of points, for example recalling the word equation for respiration and describing the stages of eutrophication. I can make links between different areas of science in their explanations. I can apply and use more abstract knowledge and understanding, in a range of contexts, such as inherited and environmental variation. I can explain the use of enzymes in digestion and give an example of an enzyme in the human body. I can describe how carbon can move between living organisms and the atmosphere. I can explain how evidence supports some accepted

	scientific ideas, such as the structure and function of cells. I can explain, using abstract ideas where appropriate, the importance
	of some applications and implications of science for example the implication of overuse of pesticides and bioaccumulation.
F6 2	
FS3	I can describe processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology, for example simple cell structure and function. I can use the word equation for photosynthesis and respiration. I take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as environmental factors affecting the distribution of organisms in habitats. I can describe how a model lung can explain the mechanism of breathing and its importance for providing a reactant needed for respiration. I can apply and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. I can identify the different organs within an organism and use them to explain the different organ systems and their importance. I can describe some evidence for some accepted scientific ideas, such as the causes of variation between living things for example; the research done by Watson and Crick. I can explain the importance of some applications and implications of science, such as the use of selective breeding,
FS2	I can describe the processes and phenomena related to organisms, their behaviour and the environment, drawing on abstract ideas and using appropriate terminology, for example the main functions of plant and animal organs and how these functions are essential and give examples of organ systems which could include; the circulatory, respiratory and digestive system for animals and the main organs of a flowering plant related to reproduction. I can explain processes and phenomena, in more than one step or using a model. I can apply and use knowledge and understanding in familiar contexts, such as different organisms being found in different habitats because of differences in environmental factors, for example give a range of reasons why a camel can live in a hot environment and a polar bear to live in a cold environment. I can describe applications and implications of science, such as solving some of the health problems that arise due to malnutrition.
FS1	I can describe some processes and phenomena related to organisms, their behaviour and the environment, drawing on scientific knowledge and understanding and using appropriate terminology, for example using food chains to describe feeding relationships in terms of transfer of energy between plants and animals in a habitat and plants requiring sunlight as a producer in order to be the source of chemical energy for other organisms for respiration. I can recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things.

Pre-
FSI can use my knowledge about living things to describe the basic conditions [for example, a supply of food, water, air, light] that
animals and plants need in order to survive. I recognise that living things grow and reproduce through the study of plant, animal
reproduction. I can name the main organs involved in plant and animal reproduction. I can sort living things into groups, using
simple features. I can describe the basis for my groupings [for example, number of legs, shape of leaf], identifying objects as
living or non-living using MRSGREN. I recognise that different living things are found in different places [for example, ponds,
woods]. I can use my knowledge and understanding of basic life processes [for example, growth, reproduction] when I describe
differences between living and non-living things.

Science: Physics

BFS	
	I demonstrate both breadth and depth of knowledge and understanding of energy, forces and space. I apply this effectively in my descriptions and explanations, identifying links and patterns within and between topics, for example understanding how models like the particle model are useful in explaining physical phenomena. I can interpret, evaluate and synthesise data from a range of sources in a range of sources in a range of contexts and apply their understanding to a wide range of data on energy efficient physical systems. I can demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence gathering, for example through the role of artificial satellites and probes in communications and space exploration and theories about the start of the universe. I can describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts, such as alternative methods of electricity generation.
FS5	I can demonstrate extensive knowledge and understanding related to energy, forces and space, for example the passage of light waves through a medium or the flow of current in a parallel circuit. I use and apply this effectively in their descriptions and explanations, identifying links between topics. I can interpret, evaluate and synthesise data from a range of sources and in a range of contexts. I can show I understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed. I can describe and explain the importance of a wide range of applications and implications of science, such as relating the dissipation of energy during energy transfer to the need to conserve limited energy resources. I can carry out multi-step calculations e.g. $x = s \times t$
FS4	I can describe a wide range of processes and phenomena related to energy, forces and space, using abstract ideas and appropriate terminology and sequencing a number of points, for example how energy is transferred by radiation or by conduction. I can apply and use more abstract knowledge and understanding in a range of contexts, such as the appearance of objects in different colours of light. I can explain how evidence supports some accepted scientific ideas, such as the role of gravitational attraction in determining the motion of bodies in the solar system. I can explain, using abstract ideas where appropriate, the importance of some applications and implications of science.
FS3	

	I can describe the processes and phenomena related to energy, forces and space, using abstract ideas (I give the idea not given in question or shown on graph) and appropriate terminology, for example: electric current as a way of transferring energy. I take account of a number of factors in my explanations of processes and phenomena, for example increased strength electromagnet because of number or turns or current or iron core. I can also use abstract ideas or models, for example sustainable energy sources. I can apply and use knowledge and understanding in unfamiliar contexts. e.g. expansion and contraction in metals. I can describe some evidence for some accepted scientific ideas, e.g. conservation of energy such as the transfer of energy by light, sound or electricity. I can explain the importance of some applications and implications of science, such as the responsible use of unsustainable sources of energy.
FS2	I can describe processes and phenomena related to energy, forces and space, drawing on abstract ideas (an idea given in the question or reading off a graph) and using appropriate terminology, for example 'balanced forces' or 'unbalanced forces'. I can explain processes and phenomena, using a model, such as the length of a day or a year. I can apply and use knowledge and understanding in familiar contexts e.g. moments on a see saw. I recognise that both evidence and creative thinking contribute to the development of scientific ideas, such as objects being seen when light from them enters the eye. I can describe applications and implications of science, such as the ways sound can be produced and controlled, for example in musical instruments.
FS1	I can describe some processes and phenomena related to energy, forces and space, drawing on scientific knowledge and understanding and using appropriate terminology, for example: the observed position of the sun in the sky over the course of a day. I recognise some applications and implications of science, such as: the use of electrical components to make electrical devices, how magnetic fields are emitted from a wire carrying a current, linking pressure to force and area, and linking sound topic to how the ear works.
PFS	I can communicate observations of changes in light, sound or movement that result from actions for example: switching on a simple electrical circuit, and pushing and pulling objects. I recognise that sound and light come from a variety of sources and name some of these for example TV, radio, torches, the sun and people. I know about a range of physical phenomena and recognise and describe similarities and differences associated with them for example sound and light waves. I can compare the way in which devices, for example bulbs, motors and wires, work in different electrical circuits. I can compare the brightness or colour of lights, the loudness or pitch of sounds from looking at a waveform and the current or voltage from looking at ammeters or voltmeters. I can compare the movement of different objects in terms of speed or direction. I use my knowledge and

understanding of physical phenomena to link cause and effect in simple explanations for example, a bulb failing to light because of a break in an electrical circuit, and the direction or speed of movement of an object changing because of a push or a pull. I am beginning to make simple generalisations about physical phenomena for example, explaining that sounds they hear become fainter the further they are from the source