

Key Stage 3 Foundation Stages Reference Guide

	Knowing about and understanding religions and worldviews	Expressing and communicating ideas related to religions and worldviews	Gaining and deploying the skills for studying religions and worldviews
BFS	 Analyse arguments clearly, justifying perspectives Refer to and unpick the context and meaning of scripture Make relevant reference to scripture 	 Synthesise research using different disciplines Appraise various dimensions of religion 	 Use varied methods of study to research ultimate questions Considerable accuracy in the use of SPAG
FS5	 Evaluate diverse beliefs, perspectives, sources of wisdom and ways of life Examine responses to ultimate questions Express a well-supported personal viewpoint, showing appreciation of differing views 	 Explain ideas creatively and coherently, using the main methods of religious study Appreciate various dimensions of religion Express personal reflections with expertise 	 Evaluate questions and arguments personally and critically Explain the significance of beliefs on the life on the believer
FS4	 Appraise different understandings of religion and worldviews Explain the impact of beliefs on individuals and communities 	 Express insights into questions, giving coherent accounts of beliefs and ideas Respond critically to questions Logical chains of reasoning leading to judgement(s) 	 Enquire into and interpret ideas, sources and arguments Articulate beliefs, values and commitments clearly
FS3	 Explain the impact of and connections between ideas and practices, linking different viewpoints Appreciate different understandings of religion and worldviews 	 Explain diverse ideas and viewpoints clearly in various forms Explain your own opinion in a mature and meaningful way 	 Investigate and explain why religions and worldviews matter Reasoned consideration of different points of view
FS2	 Describe religions and worldviews Connect ideas 	 Describe your opinion giving relevant reasons Give thoughtful responses using different forms of expression 	 Apply ideas about religions and worldviews thoughtfully Respond creatively to key concepts
FS1	 Describe stories and artefacts, suggesting meanings for sources of wisdom, festivals and worship Discuss ideas and express an opinion 	 Ask questions and give opinions about religions, beliefs and ideas 	 Consider and discuss questions, ideas and various points of view Collect, use and respond to ideas
PFS	 Recall, name and talk about materials of religious and non- religious significance 	 Observe, notice and recognise religious and non- religious materials 	 Notice and find out about religions and worldviews

	Algorithms	Communication	Data	Information Technology	Programming	The Computer
Pre FS	Understand what an algorithm is and be able to demonstrate examples.	 Use a search engine to find suitable information quickly Give rules for keeping safe online Give examples of what would be inappropriate when online Explain how to report inappropriate things that might happen online 	 Explain what data is Give examples of different types of data Explain how data links to information Tell you the difference between text and numbers 	 Create, store and edit files using appropriate file and folder names independentl y Choose suitable images and text 	 Explain why instructions need to be accurate for computers. 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. 	 Explain why computers aren't intelligent. Explain some basic things you need to start using a computer. Explain what coding is. List different types of digital devices. Give an example of hardware and software.
FS1	 Can follow basic logical algorithms. Explain what is meant by abstraction, decomposition and pattern recognition. 	 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 Can add data and make simple calculations in spreadsheets. Explain some ways of keeping data safe Convert 4 bit binary to denary 	 Collect, organise and present data and information that is suitable for the purpose. Comment on the success of the solution they've made. 	 Make a program from the algorithm designed. Use a variable. Use an IF ELSE statement. 	 Explain examples of input devices. 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. Give examples of embedded systems

			Complete truth tables for one logic gate			
FS2	 Able to create a basic algorithm in the form of a Flowchart and embed selection (IF and Else) 	 Explain lots of golden rules for being a responsible online user. Give at least two ways to report concerns when online. Understands common threats online such as viruses, grooming, ransomware attacks. 	 Create a complex search using more than one field. Use Boolean and other operators in web searches Convert up to 8 bit binary to hexadecimal and denary. Predict the output from simple logic circuits 	 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. 	 Implement input with variable assignment to get data from users. Concatenate output to use data from variables. 	 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.
FS3	 Be able to explain why algorithms are necessary and can link to real world computing concepts. Able to use iteration in an algorithm. 	 Explain how the internet works. Explain how a network works (LAN). Explain what cloud computing means. Explain the difference between LAN and WAN. Knows how to communicate effectively online 	 Know what binary is and why computers use it. Know how text and images are represented on a computer. Explain what compression is. 	 Can use software applications with little support to create basic documents that generally meet the needs of an audience. Can identify which legislation has been breached in 	 Implement a selection statement with at least two branches Trace the use of a 1D list Can use more than one operand when programming Predict the outcome from programs that 	 Explain what the main parts of the computer do. Explain how the CPU works with memory. Explain what happens during the fetch-execute cycle. List more than three operating systems. Explain what open-source means.

	Can make a search/sort algorithm.	 depending on age range. Can explain the benefits that come from setting up a network 		different scenarios. • Knows how to communicate effectively online depending on age range.	use simple Boolean logic.	• Explain how to maintain an operating system using some utilities.
FS4	Describe how to improve their algorithm. so that it uses fewer instructions to achieve the same result.	 Explain what these devices do; hubs, routers and switches Know how to use technologies and online services securely. Understands the basic hardware involved in setting up network communication. Can explain what is meant by cloud computing and compare to other storage forms. 	 Explain how numbers, images, sounds and character sets are represented on a computer. Add binary numbers. Explain how resolution affects file sizes. Explain how colour depth affects file sizes. Explain what a data structure is and compare it to a variable. Explain more than two methods of security and give advice on how to keep data safe. 	 Justify the choice of and independently combine and uses multiple digital devices, internet services and application software to achieve given goals. Evaluate the trustworthiness of digital content. Identify and explains how the use of technology can impact on society. Design criteria for users to evaluate the quality of solutions. 	 Implement count controlled iteration Can fix syntax and logical errors in code Can create basic solutions to a range of problems and explain their reasoning Write conditions that use Boolean operators Code may include comments with some errors 	 Explain how main memory works. Explain what an embedded system is and why they are used. Explain how the CPU uses registers and how memory is located.
FS5	 Recognise that the design of an algorithm is distinct from its expression in a 	Explain how web servers process and store data.	 Explain why some images become pixelated. 	Creates creative projects using a wide range of software applications that	 Use variables in subroutines. Implement a function and pass arguments into its parameters. 	 Explain what virtual memory is and when it would be used. Describe how network hardware works together

	•	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 the data protection act relates to online users. Can identify an online threat and explain suitable prevention methods. Is aware basic network protocols for the transmission of data online.	•	Explain why higher resolution means better data quality. Create complex logic circuits when given real life scenarios	•	meet the desired audience. Can explain how technology can impact either positively or negatively on society, the individual, or the environment. Can successfully create digital artefacts for a desired audience and function	•	Select and implement different loop structures for the correct purpose. Explain when to use different loop structures. Find errors in complex programs and then correct them.	•	to enable devices to communicate. Describe how networks send data using packets.
	•	algorithms using structured language.										
BFS	•	Design a solution to a problem that depends on subroutines rather than sequential statements. Be able to select, justify and apply appropriate techniques and principles to develop data	•	Explain how to setup a LAN and a WAN including hardware, protocols and MAC addresses.	•	Subtract binary numbers.	•	Comments critically on the consequences of current uses of computing, including social, legal and ethical issues. Can explain emerging technologies and their implications for future use of ICT.	•	Can write complex programs that combine multiple complex techniques (such as lists, subroutines and iteration) that create effective solutions to a given problem. Code is always commented thoroughly and debugged efficiently.	•	Understands how to improve the performance of a CPU through at least two different measures

structures and algorithms for the solution of problems.			

Each strand of the assessment criteria is addressed separately (in line with GCSE and A Level Drama). Summative assessments take place once per term, assessing a different										
strand	of the criteria. For this reason progres	ss may not appear as linear.								
For exa	mple, a student who is a natural dire	ctor but less confident performer may receive a higher level in autu	mn than they do in spring.							
	AO1 – Creating and developing	AO2 – Applying theatrical skills in live performance	AO3 – Demonstrating knowledge	AO4 – Analysing and						
	ideas	Assessed during Spring term	and understanding	Evaluating						
	Assessed during Autumn term		Ongoing formative assessment	Assessed during Summer						
				term						
BFS	- <u>Effective</u> and <u>sustained</u> practical	-Vocal and physical skills are <u>secure</u> and <u>consistent</u> throughout	-Responses showing knowledge	-Secure and balanced						
	creation, development and	and demonstrate effective understanding of how creative	and understanding of theatrical	evaluation and analysis of						
	refinement to communicate	choices communicate meaning. Voice and movement shows	elements are <u>competent</u> and	their own and others						
	meaning	competent variation and range.	balanced	contribution to the						
	- <u>Secure</u> and <u>consistent</u>	-Characterisation demonstrates a <u>fully secure</u> understanding of	- <u>Competent</u> use of technical and	process of creating and						
	engagement with collaboration,	role and context within performance.	subject specific language with <u>an</u>	refining drama						
	rehearsal and refinement	-Very effective rapport and communication with other	ability to support with examples	- <u>Secure</u> and <u>balanced</u>						
	- <u>Secure</u> and <u>consistent</u> use of	performers/audience, demonstrating excellent confidence and		evaluation and analysis of						
	drama terminology	focus.		performance skills						
	-Justified explanations of their	- <u>Confident</u> control and understanding of style, genre and		demonstrated in						
	creative intentions	conventions, demonstrating a convincing interpretation of the		performance						
		text.								
		-Individual performance is developed, thoughtful and								
		sympathetic and has an <u>effective impact</u> , with <u>sustained</u> energy								
		and ease.								
FS5	- <u>Competent</u> and <u>sustained</u>	-Vocal and physical skills are <u>secure</u> and <u>consistent</u> throughout.	-Responses showing knowledge	-Coherent evaluation and						
	practical creation, development	Secure technical control in the use of vocal and physical	and understanding of theatrical	analysis of their own and						
	and refinement to communicate	techniques.	elements are given with	others contribution to the						
	meaning	-Characterisation demonstrates a <u>secure</u> understanding of role	competency and detail	process of creating and						
	- <u>Secure</u> engagement with	and context within performance.	-Competent use of technical and	refining drama						
	collaboration, rehearsal and	- <u>Effective</u> rapport and communication with other	subject specific language	-Competent evaluation						
	refinement	performers/audience, demonstrating effective confidence and		and analysis of						
	- <u>Consistent</u> use of drama	focus.		performance skills						
	terminology	- <u>Secure</u> control and understanding of style, genre and		demonstrated in						
	- <u>Sustained</u> explanations of their	conventions.		performance						
	creative intentions	-Individual performance is <u>developed</u> and has an <u>effective</u>		-There is a <u>balance</u>						
		impact, with sustained energy and ease.		between evaluation and						
				analysis and an ability to						
				link between the two.						
FS4	- <u>Competent</u> practical creation,	-Vocal and physical skills are sound and generally consistent.	-Responses showing knowledge	- <u>Coherent</u> evaluation and						
	development and refinement to	Vocal and physical performance shows general variation and	and understanding of theatrical	analysis of their own and						
	communicate meaning	range.		others contribution to the						

	-Clear engagement with	-Characterisation demonstrates a sound understanding of role	elements are given with emerging	process of creating and
	collaboration, rehearsal and	and context within performance.	clarity and some detail	refining drama
	refinement	-Sound rapport and communication with other	- Basic use of technical and subject	-Competent evaluation
	-Coherent use of drama	performers/audience_demonstrating adequate confidence and	specific language	and analysis of
	terminology	focus	speenie language	nerformance skills
	-Coherent explanations of their	-Clear control and understanding of style, genre and		demonstrated in
	creative intentions	conventions		nerformance
		Individual performance is generally developed and has a clear		performance
		impact, with emerging energy and ease.		
FS3	-Some practical ideas are offered	-Vocal and physical skills are adequate and generally	-Basic knowledge and some	-Adequate evaluation and
	with development of how to	appropriate. Sound technical control in the use of vocal and	understanding of theatrical	analysis of their own and
	communicate meaning	physical techniques.	elements tend to be reported and	others contribution to the
	-Adequate engagement with	-Characterisation demonstrates a sound understanding of role.	described	process of creating and
	collaboration. rehearsal and	-Adequate rapport and communication with other	-Basic use of technical and subject	refining drama
	refinement	performers/audience.	specific language	-Adequate evaluation and
	-Generally adequate use of drama	- Some clear control and understanding of style, genre and		analysis of performance
	terminology	conventions.		skills demonstrated in
	-Adequate explanations for their	-Individual performance is generally developed, with emerging		performance
	creative intentions	energy and ease.		
FS2	-Underdeveloped practical ideas	-Vocal and physical skills are <u>underdeveloped</u> and vocal delivery	-Responses showing knowledge	- <u>Underdeveloped</u>
	are shared	lacks communication skill. Basic technical control in the use of	and understanding of theatrical	evaluation and analysis of
	- <u>Tentative</u> engagement with	vocal and physical techniques.	elements tend to be reported and	their own and others
	collaboration, rehearsal and	Characterisation demonstrates basic understanding of role.	<u>described</u>	contribution to the
	refinement	-Limited rapport and communication with other	- <u>Limited</u> use of technical and	process of creating and
	- <u>Inconsistent</u> use of drama	performers/audience.	subject specific language	refining drama
	terminology	-Limited control and understanding of style, genre and		-Underdeveloped
	-Basic, underdeveloped	conventions.		evaluation and analysis of
	explanations for creative ideas	-Individual performance is underdeveloped , with limited energy		performance skills
		and ease.		demonstrated in
				performance
FS1	-Limited practical ideas are shared	-Vocal and physical skills are limited and vocal delivery is	-Limited knowledge and	-Limited evaluation and
	-Limited engagement with	inappropriate and inconsistent . Vocal and physical performance	understanding of theatrical	analysis of their own and
	collaboration & rehearsal	lacks variation and range.	elements	others contribution to the
	-Limited use of drama terminology	-Characterisation is uneven and lacks clarity, with limited focus	-Limited use of technical and	process of creating and
	-Limited explanations for creative	and confidence.	subject specific language	refining drama
	ideas	-Lacking rapport and communication with other		-Limited evaluation and
		performers/audience.		analysis of performance
		-Lacking control and understanding of style, genre and		skills demonstrated in
		conventions.		performance
		-Individual performance has limited impact, lacking energy and		
		ease.		

	AO1 Understanding	AO2 Language	AO2 Structure	AO3 Comparison of writers' ideas &	AO4 Personal and Critical Response to	LIT Context and Writer's Message
	and Inference			methods	Text	
		Beyond 5 - As b	elow, but with insight, indep	endence, flair and increasir	ng sophistication.	
5 Effective and Excelling	 Successfully considers a range of writers' ideas as crafted by the author. Able to give effective and valid explanations of implicit meanings and viewpoints independently. Consistently embeds a range of appropriately chosen textual detail at all times. 	 Analyses and evaluates a range of writer's language choices in depth, and can comment accurately on some advanced language, including patterns of language. Uses a wide range of subject terminology accurately, including some more challenging terms. Considers author's intentions in relative depth. 	 Analyses and evaluates the effects of a range of writers' structural choices. Uses more complex subject terminology accurately. Considers author's intentions in relative depth. 	 Makes clear and valid comparisons, evaluating some more challenging and inferential ideas. Explanations are consistently detailed and apt, considering the author's intentions in depth. 	 Evaluates the text clearly and in detail. Appreciates the effects of the writer's methodology and can comment on challenging ideas, using adverbs skilfully. Comments are firmly rooted in the text, interesting and inferential. 	 Explores the writer's ideas and attitudes within the social, historical and cultural context of the text. Can consider the varied audiences and the author's possible message. Comments are well-argued, clear and valid.
4 Consistently enhancing	 Can successfully express an understanding of writers' purpose and ideas as crafted by the author. Increasingly understands inferred meanings and can explain. 	 Explains the effects of a writer's language choices in detail, and attempts to analyse some more advanced language. Uses a range of subject terminology with increasing accuracy. Makes some valid comments about author's intentions. 	 Explains the effects of a writer's structural choices in some detail. Uses subject terminology with increasing accuracy. Makes some valid comments about author's intentions. 	 Makes clear comparisons between texts, and identifies a few implicit ideas. Explanations are relatively detailed and consistently valid. Begins to explore author's intentions. 	 Makes evaluative comments about the text with an understanding of writer's methodology. Can begin to discuss some more challenging ideas, using adverbs and verbs effectively. Comments are often inferential and rooted in the text. 	 Explains the writer's ideas and attitudes and connects these to different aspects of context, including how different readers / audiences might react. Comments are detailed and well-explained, but some minor misconceptions might still be evident.

	 Begins to embe more relevant textual detail with increasing consistency. 	d				
3 Competent and Secure	 Developing understanding writers' purpos and ideas as the crafter of the text. Able to attemp some inference but there may errors in understanding be inconsistent More relevant textual detail chosen, but selects obvious or scaffolded, choices. Often doesn't embed quotations. 	 Identifies and explains the effects of a writer's techniques and language choices, but tends to comment on more obvious techniques. Able to use some technical terminology but not always consistently / accurately. Increasingly links to author's intentions, but still generalises somewhat. 	 Explains the effects of some of the writer's structural choices. Able to use some subject terminology about structure but not always accurately / consistently. Increasingly links to author's intentions, but still generalises somewhat. 	 Identifies some similarities and/or differences between texts, but they're mostly obvious. Possibly some implicit comments. Explanations are clear and mostly valid. Limited consideration of author's intentions. 	 Makes some evaluative comments about the text with a growing awareness of the writer's methodology, but still tends to comment on the simpler ideas. May begin to use adverb and verbs when discussing author's purpose. Comments are more rooted in the text and explained well. May begin to infer. 	 Beginning to identify writer's ideas and attitudes in the text and links these to context. Comments are more detailed, with a number of generalisations and/or misconceptions still evident.
2 Developing and establishing	 No obvious misconception but comments are not always linked to write ideas / acknowledge that the writing crafted. 	 Some ability to identify some basic language techniques and appropriate words but comments can be simple. Attempts to use technical terminology, with a number of errors. 	 Discusses the sequence of a text in a more detailed manner, however any further comments are inaccurate or generalised. 	 Some straightforward links about similarities and/or differences between texts, using simple connectives. 	 Offers a straightforward opinion about the text. Comments are not always well explained, but are generally rooted in the text. 	 Shows familiarity with the writer's ideas and text in context whether as a reader now or in the social, historical context.

	•	Deals successfully with explicit elements of the text. Limited use of textual detail or extended references to the text, not always relevant to the task.	•	May attempt to discuss author's intentions, but mostly generalises.	•	May use some limited terminology but comments are mostly inaccurate. May attempt to discuss author's intentions, but mostly generalises.	•	Explanations more developed, but areas of misunderstanding evident. May focus on one text more than the other.			•	Comments are slightly more detailed, but misconceptions/ generalisations are evident throughout.
1 Emerging	•	Limited understanding of the text, with some significant misconceptions. Deals purely with explicit, obvious meanings, often inconsistently. May be no textual detail, or inappropriately chosen reference to the text.	•	A selection of words and phrases may be identified, but any comments are simple or repeat the quotation. Very limited, or no, use of the technical terminology. Numerous errors in identification. May give inaccurate comments on the author's intentions.	•	Can make basic comments on the sequence of the text, but in a very generalised manner. No use of the terminology. May give inaccurate comments on the author's intentions.	•	Some ability to comment on texts but no analytical linking or cohesion evident. Explanation minimal or unclear.	•	Makes very simple, overtly personal comment about the text. Comments are unclear and not linked to the text.	•	Makes some generalised and very simple comments about the writer's ideas and the text in context.

Foundation Stages in Geography – Assessment Criteria at KS3

		400.0		
	AU1 - Demonstrate knowledge of	AO2 - Demonstrate	AU3 - Apply knowledge and	AO4 - Select, adapt and use a
	anvironments and different scales	geographical understanding	analyse and evaluate	investigate questions and issues
	environments und uŋjerent scules.	used in relation to places	acographical information and	and communicate findings
		environments and processes	issues and to make judgements	and communicate jinaings.
		and the inter-relationships	issues and to make judgements.	
		between places, environments		
		and processes.		
	KNOWLEDGE	UNDERSTANDING	APPLICATION	GEOGRAPHICAL SKILLS
	To demonstrate a detailed and	To detail, analyse and evaluate	To analyse and evaluate	To choose and justify the choice of
BFS	extensive factual knowledge about	geographical features and	information about the places we	geographical skills and evaluate their
	the places we are studying.	processes. As well as to detail,	are studying. I can now do the	effectiveness. Students clearly
		analyse and evaluate how	following: evaluate, create,	understand cartographic and OS
		places are linked in geography.	hypothesise, assess, construct,	map skills and use these to interpret
			imagine and devise.	patterns. Students have good
				graphical skills and can draw and
				interpret data on sophisticated
				graphs e.g. choropleth and flow line
				maps. Students use numerical and
				statistical skills to interpret data
				anomalous values
				anomalous values.
FS5	To demonstrate a detailed and	To show a highly detailed,	To write detailed explanations that	To choose from a wide range of
	factual knowledge about the places	evidenced geographical	show I know and understand	geographical skills and apply them
	we are studying	understanding of geographical	information about the places we	with precision. Students use more
		features and processes and to	are studying. I can now do the	sophisticated statistical skills e.g.
		show a highly detailed,	following: judge, prioritise, reflect,	percentage change or cumulative
		evidenced understanding of	justify, recommend and	frequency as a means of analysing
		how places are linked in	summarise.	data.
		geography.		
CS 4	To demonstrate a broad factural	To show detailed avidenced	To write detailed descriptions and	To use a wide range of geographical
134	knowledge about the places we are	ro snow detailed, evidenced	clear explanations that show I	skills and apply them effectively
	studving	geographical features and	know and understand information	Students have an improved
	studying	geographical reactives and	know and understand information	students have an improved

			1	
		processes and to show a	about the places we are studying. I	knowledge of how numerical and
		detailed, evidenced	can now do the following: discuss,	statistical skills can be used to
		understanding of how places	analyse, categorise, distinguish,	describe and analyse geographical
		are linked in geography.	compare, contrast and identify.	data. Students are more
				independent and self-sufficient with
				their skills.
FS3	To demonstrate a sound factual	To show detailed geographical	To write detailed descriptions and	To use a range of geographical skills
	knowledge about the places we are	understanding of geographical	simple explanations that show I	effectively including a working
	studying.	features and processes and to	know and understand information	understanding of OS map skills such
		show a detailed understanding	about the places we are studying. I	as 6 figure grid references; a broader
		of how places are linked in	can now do the following: explain,	range of graphical techniques,
		geography.	decide, examine, and relate.	including multiple line graphs; as
				well as greater usage of simplistic
				statistical and numerical skills (e.g
				mode, median) with an increasing
				attempt to understand trends
				reflected in the data set.
FS2	To demonstrate an adequate	To show I have a clear	To write clear descriptions that	To use a range of basic geographical
	factual knowledge about the places	geographical understanding of	show I know and understand	skills including an increasing working
	we are studying.	geographical features and	information about the places we	knowledge of OS map skills and an
		processes and to show a clear	are studying. I can now do the	understanding of data through
		understanding of how places	following: describe, select, outline,	statistical skills e.g. mean.
		are linked in geography.	match and recognise.	
FS1	To demonstrate a basic knowledge	To show a basic geographical	To write simple descriptions that	To use a small range of basic
	about the places we are studying.	understanding of geographical	show and understand basic	geographical skills.
		features and processes and to	information about the places we	
		show a basic understanding of	are studying. I can do the	
		how places are linked in	following: name, state, list, label	
		geography.	and tell.	

Foundation Stages in History – Assessment Criteria at KS3

	Causation	Change and continuity	Historical evidence	Historical interpretations
BFS	Signpost 4: Unintended consequences HISTORICAL ACTORS cannot	Signpost 4: Complexity of change Change and continuity are not a single process. There are many ELOWS of change	Signpost 5: Sources in context Historical evidence must be understood on its own terms. This means thinking about the	Signpost 4: Interpretations in context Historical interpretations must be understood on their own terms. This
	always predict the effects of	and continuity operating at the same time.	CONTEXT in which the source was created and	means thinking about the CONTEXT in
	their own actions leading to	Not all FLOWS go in the same direction	the conditions and views that existed at the	which they were created, the conditions
	UNINTENDED CONSEQUENCES.		time.	and views that existed at the time, and
	These unintended consequences			what impact these factors might have on
	can also lead to changes			the final interpretation.
505	Circurant 2: Demonstration d	Circurate 2: Floure of continuity and	Size east 4. Evaluating accuracy	
F55	Signpost 3: Personal and	Signpost 3: Flows of continuity and	Signpost 4: Evaluating sources	Signpost 3: Evaluating interpretations
	Historical changes happen	Change is a process which varies over time.	is read by thinking about how the AUTHOR.	be considered. This means considering
	because of two main factors: the	Change can be described as a FLOW in	intended AUDIENCE and PURPOSE of an	their VIEWPOINT, PURPOSE, AUDIENCE
	actions of HISTORICAL ACTORS	terms of its PACE and EXTENT and can be	historical source might affect its WEIGHT as	and the EVIDENCE chosen to build their
	and the CONDITIONS (social,	described in terms of TRENDS and	evidence in relation to a particular question.	interpretation and what impact this might
FS4	economic etc.) which have influenced those actors	TURNING POINTS.	Signpost 3: Source utility	have on the final interpretation.
	initialitied those actors.		Historical evidence has multiple uses. The	
			UTILITY of a piece of historical evidence varies	
			according to the specific enquiry or the questions	
563	Circument 2: Influence of footons	Circulant 2. Internation continuity and	being asked.	Circurate 2: Drawing information from
F53	Different causes have different	change	Historical evidence must be CROSS-REFERENCED	interpretations
F32	LEVELS OF INFLUENCE. Some	Change and continuity are INTERWOVEN	so that claims are not made based on single	It is possible to draw INFERENCES from
	causes are more important than	and both can be present together in	pieces of evidence. CROSS-REFERENCING means	interpretations of the past, just as with
	other causes.	history. CHRONOLOGIES can be used to	checking against other primary or secondary	historical sources. INFERENCES will reveal
		show change and continuity working	sources.	the MESSAGE of a particular
		together over time.		interpretation.
FS1	Signpost 1: Causal webs	Signpost 1: Identifying change	Signpost 1: Inferences from sources	Signpost 1: Identifying interpretations
	Change happens because of	Past societies are not fixed: there are	When we write history we need to create	Historical interpretations are everywhere.
	MULTIPLE CAUSES and leads to	changes which have occurred spanning	interpretations of the past based on evidence.	Every piece of historical writing is an
	many different results or	centuries. Changes in the past can be	INFERENCES are drawn from a variety of primary	interpretation of some sort. The past is not
	WEB of related causes and	hetween two periods	sources to create interpretations of the past.	nrocess of interpretation
	consequences.	between two perious.		

Speaking:

In Languages, students will develop higher levels of independence as they move through the Foundation Stages. As they progress, their speaking will demonstrate a greater understanding of grammar and an ability to respond to a range of questions spontaneously.

Foundation Stage 1: Speaking

When I am speaking with my teacher, in pair work or in front of the class:

I can give clear one word answers or short sentences but my pronunciation is not always good.

I sometimes hesitate and I ask for help with understanding questions.

I can answer most simple questions when my teacher prompts me with a starter phrase.

I repeat the same types of structures and phrases to answer questions.

I give opinions using a few phrases that I know.

I have a limited range of vocabulary and I often repeat the same adjectives and phrases.

What I want to say is usually clear if I am speaking about something I have just learnt or practised.

I am able to say a few things about what I am learning about currently.

I am able to remember a question which I could use in class.

Foundation Stage 2: Speaking

When I am speaking with my teacher, in pair work or in front of the class:

I can communicate quite clearly and my pronunciation is usually good.

- I sometimes hesitate and I ask for help with understanding questions.
- I can answer most simple questions when I know what I'm being asked.
- I repeat the same types of structures and phrases to answer questions.
- I give opinions using a few phrases that I know.

I use a limited range of vocabulary and I often repeat the same adjectives and phrases.

What I want to say is usually clear if I am speaking about something I have just learnt or practised.

I may try to talk about the past, the present or the future but I still struggle to make my verbs match the tense that I want to talk in.

I am able to talk about a few different topics and I can remember vocabulary from past topics.

I am able to remember a few different questions that I could use to ask my friend an opinion or to ask my teacher for something.

Foundation Stage 3: Speaking

When I am speaking with my teacher, in pair work or in front of the class:

I can communicate quite clearly in full sentences and my pronunciation is usually good.

I sometimes hesitate and I occasionally ask for help with understanding questions.

- I can answer almost all questions when I know what I'm being asked.
- I repeat the same types of structures and phrases to answer questions.

I give opinions using a few phrases that I know and I sometimes give a reason for my opinion.

I use a variety of vocabulary but I often repeat the same adjectives.

People can usually understand me although occasionally what I want to say is unclear if I'm speaking about a topic I'm not learning at the moment.

I may try to talk about the past, the present or the future but I sometimes still struggle to make my verbs match the tense that I want to talk in.

I am able to talk about a few different topics and I can remember vocabulary from past topics.

I am able to create simple questions of my own for both my teacher and my friends although I don't yet understand the difference between formal and informal language.

Foundation Stage 4: Speaking

When I am speaking with my teacher, in pair work or in front of the class:

I can communicate clearly and my pronunciation is good.

I sometimes hesitate and occasionally I get stuck on what a question means but I tend to work this out on my own.

I can answer almost all questions I am asked.

I repeat the same types of structures and phrases to answer questions.

I regularly give opinions using lots of familiar phrases and I sometimes give reasons for my opinions.

I use a variety of different vocabulary.

I sometimes try to use some more complex structures but I often make mistakes with these.

I am quite accurate when I speak although what I want to say is sometimes a bit unclear.

I try to talk about the past, the present and the future on different topics that I have covered.

I am able to talk about a variety of different topics and I can switch between topics of conversation with prompts from my teacher.

I am able to create simple questions of my own for both my teacher and my friends although I don't yet understand the difference between formal and informal language.

Foundation Stage 5: Speaking

When I am speaking with my teacher, in pair work or in front of the class:

I can communicate clearly and my pronunciation is good.

I sometimes hesitate but I can answer all questions my teacher or friend asks me.

I can answer questions giving all of the information required.

I am sometimes spontaneous although I often repeat the same structures and phrases.

I regularly give opinions using lots of familiar phrases and I normally give reasons for my opinions.

I use a variety of different vocabulary.

I try to use some more complex structures to show more advanced language.

I am very accurate when I speak, although I sometimes make mistakes when attempting more complex structures.

I can talk about the past, the present and the future on any topic I have covered.

I am able to talk about a variety of different topics and I can switch between topics of conversation easily.

I am able to create questions of my own for both my teacher and my friends and I understand that I need to use more formal language with my teacher or another adult.

Writing:

In Languages, students will develop higher levels of independence as they move through the Foundation Stages. As they progress, their writing will demonstrate a greater understanding of grammar and range of language.

Foundation Stage 1: Writing

When I am writing:

I can communicate some messages in short simple sentences.

- I sometimes use capital letters correctly.
- I often rely on repeating the same structures and phrases.
- I give simple opinions using phrases that I know.
- I have a limited range of vocabulary and I often repeat the same adjectives and phrases.
- I can write about what I am learning currently.
- I make mistakes which can make the meaning unclear.

Foundation Stage 2: Writing

When I am writing:

I can communicate some of the information required in simple sentences.

I mostly use capital letters correctly.

- I often use the same structures and phrases.
- I use some different vocabulary but I often repeat the same adjectives.
- I give simple opinions.
- I can give simple reasons for my opinions.
- I attempt more than one tense (past, present or future) although sometimes I get it wrong
- I often make mistakes with verbs and tenses but the message is generally clear.

My work is more accurate than inaccurate.

Foundation Stage 3: Writing

When I am writing:

I can communicate quite a lot of the information required in full sentences.

I always use capital letters correctly

I don't always rely on the same structures and phrases.

I give opinions.

I give reasons for my opinions.

I use a variety of vocabulary including different adjectives.

I attempt to write about the present and the past or future using time markers even though I make mistakes.

My work is more accurate than inaccurate and my verbs are mostly secure.

Foundation Stage 4: Writing

When I am writing independently:

I can clearly communicate most of the information required, sometimes using longer sentences.

I attempt complex structures

- I give opinions using different opinion phrases
- I often give reasons for my opinions.
- I use a good variety of vocabulary including different adjectives.

I attempt to write about the present and the past or future using time markers even though I sometimes make little mistakes.

My writing is mostly accurate, despite a few mistakes when I attempt more complex structures.

I am aware of formal and informal language and of different types of text for different purposes.

Foundation Stage 5: Writing

When I am writing independently:

- I can clearly communicate my ideas using full sentences and short paragraphs.
- I understand what I need to write about, even when questions are given in the Target Language.
- I can answer questions giving all of the information required.
- I sometimes repeat the same structures and phrases but I use a variety of vocabulary.
- I regularly give opinions using lots of familiar phrases and I normally give reasons for my opinions.
- I try to use some more complex structures to show more advanced language, even though I sometimes make little mistakes.

My grammar is very accurate so my verbs and agreements are almost always correct.

I occasionally make small mistakes with spelling and accents but these don't affect how clearly you can read my work.

I can write about events in the past, the present and the future using time markers and only occasionally make mistakes with my verbs.

I can write different types of texts for different purposes and I know when and how to use formal and informal language.

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 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 decimal 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 digits 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 gradients of 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 nonstandard 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 use 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.

Foundation Stages in PE – Assessment Criteria at KS3

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

BFS	Limited understanding of safety involved in physical exercise.
	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
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
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
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
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
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
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

Foundation Stages in Science – Assessment Criteria at KS3

SCIENCE - BIOLOGY

Pre-Foundation Stage

- Students use their 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.
- They **recognise** that living things grow and reproduce through the study of plant, animal reproduction. Students should be able to name the main organs involved in plant and animal reproduction.
- They sort living things into groups, using simple features. They describe the basis for their groupings [for example, number of legs, shape of leaf]. Identifying objects as living or non-living using MRSGREN.
- They recognise that different living things are found in different places [for example, ponds, woods].
- Students use their knowledge and understanding of basic life processes [for example, growth, reproduction] when they **describe** differences between living and non-living things.
- Recognise and provide simple explanations for changes in living things [for example, diet affecting the health of humans or other animals, lack of light or water altering plant growth, drug and alcohol affecting growth of foetus].
- They identify ways in which an animals and plants are suited to their environment [for example, a fish having fins to help it swim, Cacti having spines].

Foundation Stage 1

- Students **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. Plants requiring sunlight as a producer in order to be the source of chemical energy for other organisms for respiration.
- They recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things.
- They recognise some applications and implications of science, such as the use of predators to control pest populations. The use of pesticides on crops leading to bioaccumulation. Identify a way to treat bacterial infections through antibiotics.

Foundation Stage 2

- Students **describe** 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.
- They explain processes and phenomena, in more than one step or using a model, such as the main stages of the life cycles of humans and flowering plants, describe the route that food takes through the digestive system.
- They **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.

- They recognise that both evidence and creative thinking contribute to the development of scientific ideas, for example the work of Carl Linnaeus on developing a system for classifying living organisms.
- They **describe** applications and implications of science, such as solving some of the health problems that arise when organ damage occurs.

Foundation Stage 3

- Students **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. Students can use the word equation for photosynthesis and respiration.
- They 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. Describe how a model lung can explain the mechanism of breathing and its importance for providing a reactant needed for respiration.
- They **apply** and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. Identify the different organs within an organism and use them to explain the different organ systems and their importance.
- They **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. A comparison can be made between creationism and evolution and the evidence for each described.
- They **explain** the importance of some applications and implications of science, such as the use of selective breeding, an explanation for bioaccumulation, Eutrophication and their impact on the environment and the organisms living there.

Foundation Stage 4

- Students **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 balanced symbol equation for respiration and photosynthesis and drawing a pyramid of numbers and biomass using data provided.
- They make links between different areas of science in their explanations. They apply and use more abstract knowledge and understanding, in a range of contexts, such as inherited and environmental variation. **Explain** the use of enzymes in digestion and give an example of an enzyme in the human body. **Describe** how carbon can move between living organisms and the atmosphere.
- They **explain** how evidence supports some accepted scientific ideas, such as the structure and function of cells. They **explain**, using abstract ideas where appropriate, the importance of some applications and implications of science for example the implication of antibiotic resistance on health care. **Explore** the ethical issues surrounding subjects such as; cloning, genetic engineering.

Foundation Stage 5

- Students demonstrate **extensive** knowledge and understanding related to organisms, their behaviour and the environment. They use and apply this effectively in their descriptions and explanations, identifying links between topics, for example relating cellular structure of organs to their associated life processes. How organ systems work together for the functioning of the human body for example; the circulatory and respiratory systems.
- They interpret, evaluate and synthesise data from a range of sources and in a range of contexts, for example environmental data from fieldwork, using quadrats to estimate populations and biodiversity. Interpreting and synthesising data for predator-prey relationships, the effect of temperature and pH on enzymes.

- They show they understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed, for example the short-term and long-term effects of pollution and the links to global warming. Explain how scientific ideas have changed, based on experimental evidence, for example Van Helmont.
- They **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 from living to non-living things including how carbon can be locked up, e.g: Fossil Fuels and carbon sinks. Explain the impact of deforestation, increased population, and combustion on levels of carbon in the atmosphere.

Beyond Foundation Stage

- Students demonstrate both breadth and depth of knowledge and understanding of organisms, their behaviour and the environment. They apply this effectively in their descriptions and explanations, for example; explaining the advantage of different forms of chlorophyll for photosynthesis. The ability to explain why different types of cells contain different organelles. For example, the need for muscle cells to contain many mitochondria.
- They interpret, evaluate and synthesise data, from a range of sources in a range of contexts, and apply their understanding to a wide range of biological systems.
- They 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.
- They 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. Suggest and explain how problems can be combatted by science. For example, cloning pigs for human transplants, genetically engineering crops to help third world problems, producing biofuels for a sustainable resource

Exceptional Performance

• Students must be working consistently above and beyond all the descriptors listed above.

<u>SCIENCE – CHEMISTRY</u>

Pre-Foundation Stage

Students identify a range of common materials and know about some of their properties. They describe similarities and differences between materials. They sort materials into groups and describe the basis for their groupings in everyday terms [for example, shininess, hardness, smoothness].

They describe ways in which some materials are changed by heating or cooling or by processes such as bending or stretching.

Students use their knowledge and understanding of materials when they describe a variety of ways of sorting them into groups according to their properties.

Examples include: elements, rocks, metals etc.

They explain simply why some materials are particularly suitable for specific purposes [for example, glass for windows, copper for electrical cables].

They recognise that some changes [for example, the freezing of water] can be reversed and some [for example, the baking of clay] cannot, and they classify changes in this way.

Foundation Stage 1

Students recall keywords when supplied with a definition

Students describe some processes and phenomena related to materials, their properties and the Earth, drawing on scientific knowledge and understanding. For example;

- Describing changing state by using scientific terminology such as freezing, melting etc.
- Describing how a sedimentary rock is formed,
- Describing observations of a chemical reaction,
- Describing properties e.g. malleable, brittle, high melting point etc.

Students recognise that evidence can support or refute scientific ideas, such as;

- The classification of reactions as reversible and irreversible.
- Brownian motion supports the theory of atoms.
- Chemical tests (e.g. limewater) can be used to identify products made in a chemical reaction.
- An increase in temperature supports the idea that chemical reactions release energy.
- A change in indicator colour identifies acids, alkalis and neutral solutions

Students recognise some applications and implications of science, such as;

- The safe use of acids and alkalis (implications are skin burns and harmful to eyes)
- Plants can be used as medicines
- Limestone is used to make building materials, statues and other useful products (e.g. cement, toothpaste etc.)

Foundation Stage 2

Students describe processes and phenomena related to materials, their properties and the Earth, drawing on abstract ideas and using appropriate terminology, for example;

- Describe different types of weathering of rocks.
- Describing changing state in terms of particles.
- Describing observations of a chemical reaction and state what causes these observations.
- Describing combustion of fuels, using ideas about reacting with oxygen and energy being released.
- Describe a pattern in reactivity by drawing on the outcomes of displacement reactions.
- Describing elements, compounds and mixtures using particle diagrams
- Identifying an acid or alkali using indicators

They explain processes and phenomena, in more than one step or using a model, such as;

- Using a diagram to explain how sedimentary rocks are formed.
- Drawing a shell diagram to represent an atom.
- When provided with the names of reactants and products, construct a word equation to show what happens in a chemical reaction.
- Explaining melting, evaporating etc. using the particle model.

They recognise that both evidence and creative thinking contribute to the development of scientific ideas, such as;

- Basing separation methods for mixtures on physical and chemical properties.
- Dancing pollen grains and creative thinking helped develop the theory of atoms.
- Patterns helped Mendeleev develop the periodic table.
- The appearance of rocks is used to develop ideas about how they're made.

They describe applications and implications of science, such as;

- The uses of metals based on their specific properties
- The benefits and drawbacks of the use of fossil fuels.
- The advantages and disadvantages of limestone quarrying.

Foundation Stage 3

Students describe processes and phenomena related to materials, their properties and the Earth, using abstract ideas and appropriate terminology, for example;

- Describe different types of weathering of rocks.
- Describe how different types of rocks are formed.
- Describing changing state in terms of particles.

- Describing observations of a chemical reaction and state what causes these observations.
- Describing combustion of fuels, using ideas about reacting with oxygen and energy being released.
- Describe a pattern in reactivity by drawing on the outcomes of displacement reactions.
- Describe elements as solid, liquid or gases based on melting and boiling points.

They take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, for example;

- The deposition of sediments and their formation into rocks.
- Drawing a shell diagram to represent an atom.
- Using observations or use reactants or products provided to construct a word equation in order to model a chemical reaction.
- Explaining melting, evaporating etc. using the particle model.
- Use chemical formula to deduce the elements present and the number of atoms.

They explain the importance of some applications and implications of science, for example;

- The production of new materials with specific desirable properties
- The separating of crude oil to obtain useful fuels and other products
- Uses of carbonates to reduce indigestion
- Evaluate the advantages and disadvantages of Quarrying of limestone

Foundation Stage 4

Students describe a wide range of processes and phenomena related to materials, their properties and the Earth, using abstract ideas and appropriate terminology and sequencing a number of points, for example

- Describing the rock cycle.
- Describing the evolution of the earth's atmosphere.
- Describing how global warming or acid rain is caused.
- Describing how salt can be extracted from rock salt.
- Describe and explain the process of chromatography

They make links between different areas of science in their explanations, such as

- Between the nature and behaviour of materials and their particles.
- Explaining melting, evaporating etc. using the particle model and ideas about energy breaking forces between particles.
- Using ideas about changing states and the particle model to explain how distillation works

They apply and use more abstract knowledge and understanding, in a range of contexts, such as;

- The particle model of matter.
- Symbols and formulae for elements and compounds.
- Naming compounds from chemical formula.
- Using balanced symbol equations to represent chemical reactions.

They explain how evidence supports some accepted scientific ideas, such as

- Reactions of metals with acid or water support the reactivity series of metals.
- Reflection of alpha particles supports the idea of an atom having a nucleus.

They explain, using abstract ideas where appropriate, the importance of some applications and implications of science, such as the need to consider the availability of resources, and environmental effects, in the production of energy and materials.

Foundation Stage 5

Students demonstrate extensive knowledge and understanding related to materials, their properties and the Earth. They use and apply this effectively in their descriptions and explanations, identifying links between topics, for example

- Relating mode of formation of rocks to their texture and mineral content.
- Relating increasing carbon dioxide levels to diminishing ice in the North Pole and increasing temperature of the Earth.
- Students link understanding of atoms and bonds with energy and temperature changes to describe reactions as exothermic or endothermic.
- Students use ideas about particles and energy to explain why increasing temperature speeds up the rate of a chemical reaction.
- Describe and explain the process of continental drift.

They represent common compounds by chemical formulae and use these formulae to form balanced symbol equations for reactions.

They show they understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed. For example;

- Newlands periodic table was changed due to Mendeleev's version including gaps for undiscovered elements.
- Rutherford's gold leaf experiment disproved the plum pudding model.

They describe and explain the importance of a wide range of applications and implications of science. (Consistent level 6's for this thread would suggest that students and explain a **wide range** of applications and implications)

Beyond Foundation Stage

Students demonstrate both breadth and depth of knowledge and understanding of materials, their properties and the Earth, for example the different timescales over which rock formation and deformation take place.

They apply this effectively in their descriptions and explanations, identifying links and patterns within and between topics, for example relating the properties of materials to the nature of their constituent particles.

They interpret, evaluate and synthesise data from a range of sources in a range of contexts, and apply their understanding to a wide range of chemical systems, such as explaining chemical behaviours that do not fit expected patterns.

They demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence-gathering.

They describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts.

Exceptional Performance

Students must be working consistently above and beyond all the descriptors listed above.

SCIENCE – PHYSICS

Pre-Foundation Stage

Students communicate observations of changes in light, sound or movement that result from actions for example,

- switching on a simple electrical circuit,
- pushing and pulling objects

They recognise that sound and light come from a variety of sources and name some of these.

- TV/ radio
- Torch
- Sun
- People

Students know about a range of physical phenomena and recognise and describe similarities and differences associated with them for example

• sound, light and water waves

They compare the way in which devices for example,

- bulbs
- motors
- resistors

work in different electrical circuits.

They compare the

- brightness or colour of lights
- the loudness or pitch of sounds from looking at a waveform.
- the current or voltage from looking at ammeters or voltmeters

They compare the movement of different objects in terms of speed or direction.

Students use their 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,
- the direction or speed of movement of an object changing because of a push or a pull,
- an object being weightless because of distance from a gravitational field due to a massive object such as a planet.

They begin to make simple generalisations about physical phenomena for example,

- explaining that sounds they hear become fainter the further they are from the source
- or gravitational fields become fainter the further they are from the source
- or EM radiation become fainter the further they are from the source

Foundation Stage 1

Students 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.
- Describe what is emitted from the nucleus in radioactive decay.

They recognise that evidence can support or refute scientific ideas,

- such as sounds being heard through a variety of materials.
- recognise CMBR and Redshift support big bang theory.
- moons of Jupiter and phases/ size of Venus supports heliocentric theory and disproves geostationary.

They recognise some applications and implications of science, such as

- the use of electrical components to make electrical devices.
- magnetic fields and moving wires generates electricity in power stations.
- link density to materials needed to make boats.
- link sound topic to how ear defenders work

Foundation Stage 2

Students 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'. Linked to gradient of a graph

They explain processes and phenomena, in more than one step such as

- the operation of an electric bell,
- convection currents,
- the weight of an object on a see-saw (moments),
- life cycle of a star.

They explain processes and phenomena, using a model, such as

- the length of a day or a year.
- Current and voltage in circuits.

They apply and use knowledge and understanding in familiar contexts. E.g.

- moments on a see saw,
- convection in a room or oven,
- wavelength of a water wave
- conduction in a metal rod.
- reflection in a mirror

They 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.
- big bang theory
- heliocentric vs geocentric.

They describe applications and implications of science, such as

- the ways sound can be produced and controlled, for example in musical instruments.
- uses of alpha, beta and gamma radiation.
- uses of EM radiation

Read data from graphs

Use formula as given in data sheet e.g. force from f=ma not m from f=ma

Foundation Stage 3

Students describe processes and phenomena related to energy, forces and space, using abstract ideas (they give the idea not given in question or shown on graph) and appropriate terminology, for example:

- Electric current as a way of transferring energy.
- Ionization of atoms by rubbing or ionizing radiation.
- Balanced or unbalanced forces linked to acceleration or constant speed with no hint given

They take account of a number of factors in their explanations of processes and phenomena, for example

- in the relative brightness of stars and planets (due to size and distance).
- increased strength electromagnet because of number or turns or current or iron core.

They also use abstract ideas or models, for example

- sustainable energy sources
- the refraction of light (model as one side of car slows down in mud or line of soldiers marching).

They apply and use knowledge and understanding in unfamiliar contexts.

- conduction in penguins feet,
- EM radiation wavelength, amplitude etc.,

- reflection linked to phases of the moon
- convection at the see side.
- moments balancing a crane.

They describe some evidence for some accepted scientific ideas,

- (conservation of energy) such as the transfer of energy by light, sound or electricity, a
- (wave model of light) the refraction and dispersion of light.

They explain the importance of some applications and implications of science, such as

- the responsible use of unsustainable sources of energy.
- safety when using lonising radiation
- safety with loud noise

Manipulate formulas to change the subject and get correct numerical answer.

Get correct unit (just one term m, s, kg, N etc. not m/s or Nm)

Foundation Stage 4

Students 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.
- electric bell workings
- life of different stars

They make links between different areas of science in their explanations, such as

- between electricity and magnetism.
- static electricity and ionising radiation
- pressure (hydraulics) and moments

They apply and use more abstract knowledge and understanding in a range of contexts, such as

- the appearance of objects in different colours of light.
- resistance in parallel circuits

They 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.

They explain, using abstract ideas where appropriate, the importance of some applications and implications of science, such as

- the uses of electromagnets
- uses of transformers.

Use compound measures appropriately. Such as

- m/s for speed,
- Nm for moment
- N/m² for pressure

Foundation Stage 5

Students demonstrate extensive knowledge and understanding related to energy, forces and space, for example

- the passage of sound waves through a medium.
- flow of current in a parallel circuit

They use and apply this effectively in their descriptions and explanations, identifying links between topics.

They interpret, evaluate and synthesise data from a range of sources and in a range of contexts. They show they understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed, such as

• the developing understanding of the structure of the solar system. [Heliocentric or geocentric]

They 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.

They carry out multi-step calculations

- force at different side of a moment system.
- force at different side of hydraulic system
- initial or final speed rather than change in speed.
- more than 3 term questions

Beyond Foundation Stage

Students demonstrate both breadth and depth of knowledge and understanding of energy, forces and space. They apply this effectively in their 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,
 - \circ $\;$ such as how sweating causes cooling.
 - o density
 - o speeds of sound

They interpret, evaluate and synthesise data from a range of sources in a range of contexts and apply their understanding to a wide range of data on energy efficient physical systems.

They 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, big bang or steady state theory.

They 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.

Exceptional Performance

Students must be working consistently above and beyond all the descriptors listed above.

Foundation Stages in Food & Nutrition

	Food Hygiene and Safety	Nutrition	Evaluation	Food Provenance	Food Science
FS5/BSF	 I know how to prevent food poisoning using the 4C's principles. I know the 14 common allergens and foods that they are found in. 	 I can identify and know the functions of all nutrients in the body. I can identify nutrients in my dishes and change the nutritional value of a dish. I can use nutritional information tables on packaging to inform my food choice. I can use the Eatwell guide to design dishes and diets for a person with special dietary requirements. 	 I am able to comprehensively conduct sensory evaluation and understand its application to real-world scenarios (for example, in product development). I have a broad repertoire of sensory descriptive language that I am able to use verbally and in written work to describe my viewpoint. 	- I can form an opinion on the impact of the food industry and consider ethical and moral issues surrounding food choice.	 I know the causes of enzymic browning and how to prevent it. I can link different heat transfer methods to different cooking methods. I can explain the processes: gelatinisation, dextrinization, caramelisation, denaturation and aeration.
FS4	 I know what the 4C's are and give examples of rules within each category. I can explain and know some examples of food poisoning, allergies and intolerances. I can provide practical solutions for kitchen hazards. 	 I can identify all basic nutrients and identify nutrients in dishes that I make. I can use traffic light nutrition labels on packaging to inform my food choice. 	 I know what sensory evaluation involves and why it is used in product development. 	 I know how to reduce food waste and a carbon footprint. I can recognise environmental logos on food packaging. 	 I can explain how heat is transferred. I know the terms: gelatinisation, dextrinization, caramelisation, denaturation and aeration.
FS3	 I can explain the importance of the 4C's. I can define the terms: food poisoning, allergy, and intolerance. 	 I can identify all 5 nutrients. I can identify a source of carbohydrate, protein, fat. I can explain the green, amber and red colour coding on food labels. 	 I can suggest detailed adaptations to change a certain quality of a dish. I can give suggestions or further adaptions that could be made to a product. You can identify characteristics of food and describe the appearance, aroma, taste and texture of food. 	 I can define food miles and food waste. I know the effects of buying foods in season. 	 I know the name of all 3 heat transfer methods. I can link different heat transfer methods to each part of the cooker. I know that some ingredients have functions.

FS2	 I know the 4C's. I can identify most kitchen hazards and explain why they are dangerous. 	 You know the 8 tips for healthy eating. I am aware of traffic light labelling on food packaging. 	 I can identify areas for improvement in my own practice. I can analyse my products and suggest ways to improve a dish. I can identify a few basic characteristics of food and use basic vocabulary to describe food 	 I know that some foods are seasonal. I can give examples of food which are grown, caught or reared. 	 I know that cooking changes the colour, flavour and texture of food. I can define conductor and insulator. I know what enzymic browning is.
FS1	 I know some hygiene and safety rules. I can identify some kitchen hazards. 	 I know what a nutrient is. I know that protein, carbohydrate and fat are nutrients. 	 I can identify weaknesses in my products and suggest solutions. I can comment on the flavour, texture or appearance of food. 	- I am aware that foods are grown, caught or reared.	 - I know the parts of the cooker. - I know some cooking methods.

Foundation Stages in Design Technology

	AO1	AO2	AO3	AO4
DT	RESEARCH	DEVELOPING IDEAS	PLANNING AND MAKING	EVALUATE
	Researching and analysing materials, artists, client needs, tools and equipment and relevant similar outcomes. Knowledge gained should inform designs decisions.	Using knowledge to develop and refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.	Using knowledge to select of tools, equipment, materials and techniques. Application of knowledge and skills to produce a quality final outcome. Present a personal and meaningful response that realises intentions.	Use knowledge to reflect on the work carried out. Justify decisions and identify areas for improvement.
BFS	BEY	OND FOUNDATION STAGE- A H	ighly developed ability of Foundation Stage 5	

FS5-	An ability to effectively research themes and the relevant work of artists, craft-persons and designers. A detailed analysis and explanation of the given Brief. A detailed understanding of specific targets markets' needs and wants. Detailed design specification relevant to research. Relevant primary and secondary research carried out in a range of areas such as; existing products, machinery, equipment, materials, industrial processes, social, cultural and environmental issues.	An effective ability to skilfully record observations and insights through focused quality drawings, modelling, drawing and annotation, and any other appropriate means relevant to intentions. As work progresses Designs can be clearly linked to the design specification. All designs are original and show a high level of creativity. An ability to effectively develop and refine ideas by selecting and purposefully experimenting with appropriate media, materials, techniques and processes.	A confident ability to demonstrate understanding of visual language. Be able to select and use tools, materials and equipment safely and efficiently. Describe, select and apply QA and QC measures. Understand the environmental impact of a range of materials and be able to justify the selection of a material. Be able to join and construct a product so that it functions as designed. Be able to compare, test, use and select a range of methods, techniques and process to create a quality, demanding product. Demonstrate quality of finish to others. Product has potential for commercial viability with small modifications.	Evaluate ideas in detail against the design specification. Seek out and respond to user feedback offering a modified version or versions. Suggest a number of modifications to ensure product is commercially viable. Justify decisions made at each stage of idea development. Understand and evaluate how the product might be made differently in industry relevant to their product.
FS4	An ability to effectively research themes and the relevant work of artists, craft-persons and designers. An analysis and explanation of the given Brief. Demonstrates an understanding of a specific targets markets' needs and wants. Write a relevant design specification. Relevant primary and secondary research carried out in areas such as; existing products, machinery, equipment, materials, industrial processes, social, cultural and environmental issues.	An ability to skilfully record observations and insights through quality drawings, modelling, annotation, and any other appropriate means relevant to intentions. As work progresses designs can be linked to the design specification. All designs are original and show a good level of creativity. An ability to develop and refine ideas by selecting and purposefully experimenting with appropriate media, materials, techniques and processes.	Ability to demonstrate understanding of visual language. Be able to select and use tools, materials and equipment safely. Name and apply a range of QA and QC measures. Understand the environmental impact of some materials and be able to justify the selection. Be able to join and construct a product so that it is mostly accurate. Be able to compare, test, use and select a range of methods, techniques and processes to create a working product. Demonstrate quality of finish to others. Product has potential for commercial viability with some modifications.	Good evaluation of ideas against the original design specification. Seek out and respond to user feedback making a few suggested changes. Can describe modifications needed to ensure product is commercially viable. Justify most decisions made during development of idea. Understand and comment on how the product might be made differently in industry relevant to their product.

FS3	A consistent ability to research themes and the relevant work of artists, craft-persons and designers An explanation of the given Brief. Demonstrates a basic understanding of a specific targets markets' needs and wants. Write a design specification. Primary and secondary research carried out on one or more of the following; existing products, machinery, equipment, materials, industrial processes. Environmental considerations are considered and mostly relevant.	An ability to record observations and insights through mostly quality drawings, modelling, annotation, and any other appropriate means relevant to intentions. As work progresses designs can be linked to the design specification. Most designs are original and show a level of creativity. Some ability to develop and refine ideas by selecting and purposefully experimenting with appropriate media, materials, techniques and processes.	Mostly able to demonstrate understanding of visual language. Be able to select and use tools, materials and equipment safely. Name and apply some QA and QC measures. Understand the environmental impact of some materials and be able to give some reasoning for selection. Be able to join and construct a product to a reasonable standard. Be able to test, use and select some methods, techniques and processes to create a finished product. Make some considerations to the finish of the product. Product requires a few modifications for it to be viable.	Evaluate ideas against the original design specification. Respond to user feedback making a few suggested changes. Can describe some modifications needed to ensure product is commercially viable. Justify some decisions made during development of idea. Make a few comments on how the product might be made differently in industry relevant to their product.
FS2	A competent ability to research themes and the relevant work of artists, craft-persons and designers. Basic explanation of the given Brief. Demonstrates an understanding of a specific target market. Write some relevant design specification points. Secondary research carried out on one or more of the following; existing products, machinery, equipment, materials, industrial processes. Environmental issues are mentioned and are relevant.	An ability to record observations and insights through some quality drawings, modelling, annotation, and any other appropriate means relevant to intentions. As work progresses designs can sometimes be linked to the design specification. Some designs are original and show a level of creativity. Some ability to refine ideas by selecting and experimenting with media, materials, techniques and processes.	Able to demonstrate understanding of visual language some of the time. Be able to select and use tools, materials and equipment safely. Name and apply one or two QA and QC measures. Understand the environmental impact of some materials and be able to give basic reasoning for selection. Be able to join and construct a product which requires a few modifications for it to be viable. Be able to test, use and select some methods, techniques and processes to create a mostly finished product. Make some considerations to the finish of the product.	Evaluate ideas against some of the design specification. Basic response to user feedback making a few suggested changes. Can describe one or two modifications needed. Justify some decisions made during development of idea. Make a few comments on how the product might be made differently in industry.
FS1	Some ability to research themes and the relevant work of artists, craft-persons and designers. The design brief has been copied down. Can name different target markets. Example given of how different products suit different people.	An ability to record observations and insights through basic drawings, modelling, labelling, and any other appropriate means relevant to intentions. As work progresses designs are loosely linked to the design specification.	Able to demonstrate basic understanding of visual language. Be able to select a few tools, materials and equipment and use them safely. Know one or two QA and QC measures. Know some environmental issues related to materials and manufacture. Be able to join and construct a product which requires modifications for it to be viable.	Evaluation ideas against some of the design specification is present but not always relevant. User feedback is recorded but not always acted on. Can identify some modifications needed to the final outcome.

Secondary research carried out on one existing product, Some ability to improve ideas but sometimes needs support to identify materials and processes needed. Work can sometimes be incomplete.	Be able to use and select some methods, techniques and processes to create a mostly finished product. Make some considerations to the finish of the product.	
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