Art and Design (Key Stage 3)

	Knowledge and aspiration	Experiment and refine	Skill	Creative outcomes
BFS	An independent highly developed ability of Foundation Stage 5			
FS5 *Foundation Stage 5*	**Research** - I independently research artists and themes and find my own relevant inspiration. **Inspiration** - Artist links are always clear, relevant, and explained within my work. I am able to independently take this inspiration and make it my own. **Knowledge** - I understand how and why art movements have evolved and can express my informed opinion of art using correct terminology.	**Experiment** - I independently experiment with a range of media and combine media in successful outcomes. **Refine** - I always improve my ideas/ techniques and skills and have a range of options. Manipulation of media shows improvement as work progresses.	**Drawing** - I show high ability in observation, ideas and insights. My drawings show a high level of accurate detail, and the style is relevant to my way of working. **Media manipulation** - I show a highly developed skilful manipulation of a range of media showing high levels of detail. Outcomes are relevant to intentions and alterations are made independently as needed. My presentation is of a high standard and all sketchbook pages are planned and well executed.	**Outcomes** - My final outcomes show a high level of skill are well refined and my development is clear throughout. I create a creative personal response realising my plans.
FS4 *Foundation Stage 4*	**Research** - I research artists and themes suggested by my teacher and find my own inspiration. **Inspiration** - Artist links are always clear, relevant and explained within my work. **Knowledge** - I understand how art movements have evolved and can use some correct terminology.	**Experiment** - I experiment with media and make successful decisions. **Refine** - I improve my ideas/ techniques and skills on my own using the success criteria as guidance. Manipulation of media is improving as work progresses.	**Drawing** - I am able to record observations, ideas and insights. My drawings show a good level of detail and are observed accurately. **Media manipulation** - I show a skilful manipulation of a range of media showing good levels of detail. Outcomes are relevant to intentions and alterations are made as needed.	**Outcomes** - My outcomes show an improved level of skill but are largely led by my teacher. My creativity is developing as I study more artist.
FS3 *Foundation Stage 3*	**Research** - I am starting to make decisions about what inspiration I take from artists that have been suggested by my teacher. **Inspiration** - Artist links are clear and relevant. **Knowledge** - I am developing an understanding of how art movements have evolved.	**Experiment** - I experiment with media making successful decisions with help from my teacher. **Refine** - I sometimes improve my ideas/ techniques and skills on my own using the success criteria as guidance.	**Drawing** - I am able to record observations, ideas and insights. My pencil control is developing and some details/ proportions are recorded accurately. **Media manipulation** - I experiment with a range of media and am beginning to manipulate materials as desired.	**Outcomes** - My outcomes show a developed level of skill but are led by my teacher.
FS2 *Foundation Stage 2*	**Research** - I can find relevant information and images of artists work suggested by my teacher. **Inspiration** - I am starting to take inspiration from artists. **Knowledge** - I am beginning to understand how art movements have changed over time.	**Experiment** - I experiment with a range of media selected by my teacher. **Refine** - I improve my ideas/ techniques and skills when prompted by my teacher.	**Drawing** - I show some ability to record observations, ideas and insights. My pencil control needs further improvement as some details/ proportions aren't recorded accurately. **Media manipulation** - I experiment with a range of media selected by my teacher. I am attempting to manipulate media as desired.	**Outcomes** - My outcomes show an improvement of skill but are led by my teacher.
FS1 Foundation Stage 1	**Research** - I can find information and images of artists work suggested by my teacher. **Inspiration** - I appreciate artists work but it does not influence my own yet. **Knowledge** - I know that art movements have changed over time but I am not sure how or why.	**Experiment** - I explore a range of media as instructed by my teacher. **Refine** - I sometimes improve my ideas/ techniques and skills when prompted by my teacher.	**Drawing** - I show limited ability to record observations, ideas and insights. My basic shapes are recognisable but proportions and details are often inaccurate. **Media manipulation** - I explore a range of media as instructed by my teacher. Limited ability to manipulate media as desired.	**Outcomes** - My skills are still improving and the response is led by my teacher.

Beliefs and Values (Key Stage 3)

	Knowing about and understanding religions and world views	Expressing and communicating ideas related to religions and worldviews	Gaining and deploying the skills for studying religions and worldviews
BFS *Beyond Foundation Stage*	I can analyse arguments clearly, justifying perspectives. I refer to and unpick the context and meaning of scripture. I make relevant reference to scripture.	I synthesise research using different disciplines. I appraise various dimensions of religion.	I use varied methods of study to research ultimate questions. I have considerable accuracy in the use of spelling, punctuation and grammar.
FS5 *Foundation Stage 5*	I evaluate diverse beliefs, perspectives, sources of wisdom and ways of life. I examine responses to ultimate questions. I can express a well-supported personal viewpoint, showing appreciation of differing views.	I explain ideas creatively and coherently, using the main methods of religious study. I appreciate various dimensions of religion. I express personal reflections with expertise.	I evaluate questions and arguments personally and critically. I can explain the significance of beliefs on the life of the believer.
FS4 *Foundation Stage 4*	I can appraise different understandings of religion and worldviews. I can explain the impact of beliefs on individuals and communities.	I express insights into questions, giving coherent accounts of beliefs and ideas. I respond critically to questions. I apply logical chains of reasoning leading to judgement(s).	I enquire into and interpret ideas, sources and arguments. I articulate beliefs, values and commitments clearly .
FS3 *Foundation Stage 3*	I can explain the impact of and connections between ideas and practices, linking different viewpoints. I appreciate different understandings of religion and worldviews.	I can explain diverse ideas and viewpoints clearly in various forms. I can explain my own opinion in a mature and meaningful way.	I can investigate and explain why religions and worldviews matter. I apply reasoned consideration of different points of view.
FS2 *Foundation Stage 2*	I can describe religions and worldviews. I can connect ideas.	I can describe my opinion giving relevant reasons. I give thoughtful responses using different forms of expression.	I can apply ideas about religions and worldviews thoughtfully. I respond creatively to key concepts.
FS1 Foundation Stage 1	I can describe stories and artefacts, suggesting meanings for sources of wisdom, festivals and worship. I can discuss ideas and express an opinion.	I ask questions and give opinions about religions, beliefs and ideas.	I consider and discuss questions, ideas and various points of view. I can collect, use and respond to ideas.
PFS *Pre-Foundation Stage*	I can recall, name and talk about materials of religious and non-religious significance.	I observe, notice and recognise religious and non-religious materials.	I notice and find out about religions and worldviews.

English Part 1 (Key Stage 3)

	Understanding and Inference (AO1)	Language (AO2)	Structure (AO2)
BFS Beyond Foundation Stage	As for Foundation Stage 5, but with insight, independence, flair and increasing sophistication.		
FS5 Foundation Stage 5	I successfully consider a range of writers' ideas as crafted by the author. I am able to give effective and valid explanations of implicit meanings and viewpoints independently. I consistently embed a range of appropriately chosen textual detail at all times.	I analyse and evaluate a range of writer's language choices in depth, and can comment accurately on some advanced language, including patterns of language. I use a wide range of subject terminology accurately, including some more challenging terms. I consider the author's intentions in relative depth.	I analyse and evaluate the effects of a range of writers' structural choices. I use more complex subject terminology accurately. I consider the author's intentions in relative depth.
FS4 Foundation Stage 4	I can successfully express an understanding of writers' purpose and ideas as crafted by the author. I increasingly understand inferred meanings and can explain. I am beginning to embed more relevant textual detail with increasing consistency.	I can explain the effects of a writer's language choices in detail, and attempts to analyse some more advanced language. I use a range of subject terminology with increasing accuracy. I make some valid comments about author's intentions.	I can explain the effects of a writer's structural choices in some detail. I use subject terminology with increasing accuracy. I make some valid comments about the author's intentions.
FS3 Foundation Stage 3	I am developing an understanding of a writer's purpose and ideas as the crafter of the text. I am able to attempt some inferences, but there may be errors or inconsistencies in my understanding. I choose more relevant textual detail, but I tend to select obvious, or scaffolded, choices. I often don't embed quotations.	I can identify and explain the effects of a writer's techniques and language choices, but tend to comment on more obvious techniques. I am able to use some technical terminology but not always consistently or accurately. I increasingly link to the author's intentions, but still generalise somewhat.	I can explain the effects of some of the writer's structural choices. I am able to use some subject terminology about structure but not always accurately or consistently. I increasingly link to author's intentions, but still generalise somewhat.
FS2 Foundation Stage 2	I have no obvious misconceptions, but my comments are not always linked to the writer's ideas nor acknowledge that the writing is crafted. I deal successfully with explicit elements of the text. I limit use of textual detail or extended references to the text, not always relevant to the task.	I show some ability to identify some basic language techniques and appropriate words but my comments can be simple. I attempt to use technical terminology, with a number of errors. I may attempt to discuss the author's intentions, but mostly generalise.	I can discuss the sequence of a text in a more detailed manner, however any further comments are inaccurate or generalised. I may use some limited terminology but my comments are mostly inaccurate. I may attempt to discuss the author's intentions, but mostly generalise.
FS1 Foundation Stage 1	I show limited understanding of the text, with some significant misconceptions. I deal purely with explicit, obvious meanings, often inconsistently. There may be no textual detail in my writing, or I give inappropriately chosen references to the text.	I can identify a selection of words and phrases, but my comments are simple or repeat the quotation. I have very limited, or no, use of the technical terminology. I make numerous errors in identification. I may give inaccurate comments on the author's intentions.	I can make basic comments on the sequence of the text, but in a very generalised manner. I show no use of the terminology. I may give inaccurate comments on the author's intentions.

English Part 2 (Key Stage 3)

	Comparison of writers' ideas & methods (AO3)	Personal and Critical Response to Text (AO4)	Context and Writer's Message (LIT)
BFS Beyond Foundation Stage	As for Foundation Stage 5, but with insight, independence, flair and increasing sophistication.		
FS5 Foundation Stage 5	I make clear and valid comparisons, evaluating some more challenging and inferential ideas. My explanations are consistently detailed and apt, considering the author's intentions in depth.	I evaluate the text clearly and in detail. I appreciates the effects of the writer's methodology and can comment on challenging ideas, using adverbs skilfully. My comments are firmly rooted in the text, interesting and inferential.	I explore the writer's ideas and attitudes within the social, historical and cultural context of the text. I can consider the varied audiences and the author's possible message. My comments are well argued, clear and valid.
FS4 Foundation Stage 4	I makes clear comparisons between texts, and identify a few implicit ideas. My explanations are relatively detailed and consistently valid. I am beginning to explore the author's intentions.	I make evaluative comments about the text with an understanding of writer's methodology. I am beginning to discuss some more challenging ideas, using adverbs and verbs effectively. My comments are often inferential and rooted in the text.	I can explain the writer's ideas and attitudes and connect these to different aspects of context, including how different readers / audiences might react. My comments are detailed and well explained, but some minor misconceptions might still be evident.
FS3 Foundation Stage 3	I can identify some similarities and/or differences between texts, but they're mostly obvious. I may make some implicit comments. My explanations are clear and mostly valid. I show limited consideration of author's intentions.	I makes some evaluative comments about the text with a growing awareness of the writer's methodology, but still tend to comment on the simpler ideas. I may begin to use adverb and verbs when discussing the author's purpose. My comments are more rooted in the text and explained well. I may begin to infer.	I am beginning to identify the writer's ideas and attitudes in the text and links these to context. My comments are more detailed, with a number of generalisations and/or misconceptions still evident.
FS2 Foundation Stage 2	I make some straightforward links about similarities and/or differences between texts, using simple connectives. My explanations are more developed, but areas of misunderstanding are evident. I may focus on one text more than the other.	I offer a straightforward opinion about the text. My comments are not always well explained, but are generally rooted in the text.	I show familiarity with the writer's ideas and text in context whether as a reader now or in the social, historical context. My comments are slightly more detailed, but misconceptions/ generalisations are evident throughout.
FS1 Foundation Stage 1	I have some ability to comment on texts but no analytical linking or cohesion is evident. My explanation is minimal or unclear.	I make very simple, overtly personal comments about the text. My comments are unclear and not linked to the text.	I make some generalised and very simple comments about the writer's ideas and the text in context.

English Part 3 (Key Stage 3)

	Communication (AO5)	Organisation (AO6)	Sentences and punctuation (AO7)	Vocabulary (AO8)	Spelling (including homophones) (AO9)
BFS	Originality, independence, flair, sophistication				
FS5 *Foundation Stage 5*	All my communication is effective and engaging, allowing those reading to fully engage and respond personally to the writing. I embed matching tones, style to audience, the purpose or the task and ensure these contribute to meaning.	I consciously craft paragraphs and, crucially, whole text. I use advanced discourse markers to subtly guide the reader effectively and complement the text's purpose.	I craft a wide range of sentence structures to heighten reading and emotional impact. I choose a wide range of punctuation for effect.	All my word choices combine to create a fluent and increasingly engaging tone. My phrasing is ambitious, and crafted effectively on a number of occasions. I craft devices and appropriately embed them throughout.	I very rarely make spelling errors, even of more complex words.
FS4 *Foundation Stage 4*	My communication is clear and effective, engaging the reader. I embed matching tone, style to audience, purpose and the task as needed.	I use paragraphs increasingly for effect. My whole text is well structured. I deploy a variety of more advancing discourse markers correctly and they create an appropriate effect.	I consciously use a range of sentence structures and forms. I make fewer errors with advanced punctuation.	All my word choices combine to create a successful, deliberate tone. My vocabulary is often ambitious and more successful in complementing the tone. I embed devices throughout to add to the overall effect.	My spelling errors do not impact meaning and I make few mistakes.
FS3 *Foundation Stage 3*	The whole piece communicates my ideas clearly and tense is secure. I include increasing moments of engagement for the reader. I can evidence that matching tone / style to audience / purpose / task was considered throughout the piece.	I use paragraphs accurately and can accurately structure a whole piece. I am starting to deploy a variety of discourse markers (e.g. however, on the other hand, despite).	I use simple, compound and complex sentences. I am starting to use commas in subordinate clauses – mostly accurately. I am beginning to use a wider range of punctuation.	All my word choices are relevant to tone. I have begun to experiment with ambitious vocabulary, sometimes inconsistently. I use clear basic devices. I make attempts at more complex ones.	I am attempting to spell more ambitious words correctly. I make some errors.
FS2 *Foundation Stage 2*	Most of my communication is clear with rare moments of engagement for the reader. My attempts at matching tone / style to audience / purpose / task are more obvious.	My text is in a logical order. I use paragraphs but not always accurately. I use appropriate time connectives (and, then, firstly, secondly...)	I use simple and compound sentences. I use basic punctuation correctly. My sentences show comma splicing. I make some errors with more complex punctuation.	Most of my word choices are relevant to tone. I show some evidence of conscious, but simple, word selection. I occasionally use devices but they are basic and may not be clear.	I make some errors with more complex spelling patterns.
FS1 Foundation Stage 1	My writing can communicate ideas clearly but there can be confusion meaning the reader is not engaged. I attempt to matching tone and style to the audience, purpose and task.	My text is in a logical order. I show an inconsistent / limited use of paragraphs.	All my sentences are simple, some are compound. I use basic punctuation correctly most of the time (capitals, full stops).	Some of my word choices are relevant to tone. My word choices are simple. I may attempt simple language devices.	I show evidence of phonetic spelling.

Maths – Using and Applying (Key Stage 3)

BFS *Beyond Foundation Stage*	I can critically examine the strategies adopted when investigating within mathematics itself or when using mathematics to analyse tasks. I examine generalisations or solutions reached in an activity and make further progress in the activity as a result. I can comment constructively on the reasoning and logic, the process employed and the results obtained. I can explain why different strategies were used, considering the elegance and efficiency of alternative lines of enquiry or procedures. I apply the mathematics I know in a wide range of familiar and unfamiliar contexts. I use mathematical language and symbols effectively in presenting a convincing, reasoned argument. My reports include mathematical justifications, distinguishing between evidence and proof and explaining my solutions to problems involving a number of features or variables.
FS5 *Foundation Stage 5*	Starting from problems or contexts that have been presented to me, I can explore the effects of varying values and look for invariance in models and representations, working with and without ICT. I progressively refine or extend the mathematics used, giving reasons for my choice of mathematical presentation and explaining features I have selected. I justify my generalisations, arguments or solutions, looking for equivalence to different problems with similar structures. I appreciate the difference between mathematical explanation and experimental evidence. I can develop and follow alternative approaches. I can compare and evaluate representations of a situation, introducing and using a range of mathematical techniques. I reflect on my own lines of enquiry when exploring mathematical tasks. I can communicate mathematical or statistical meaning to different audiences through precise and consistent use of symbols that is sustained throughout the work.
FS4 *Foundation Stage 4*	I can carry out substantial tasks and solve quite complex problems by independently and systematically breaking them down into smaller, more manageable tasks. I can interpret, discuss and synthesise information presented in a variety of mathematical forms, relating findings to the original context. My written and spoken language explains and informs my use of diagrams. I am beginning to give mathematical justifications, making connections between the current situation and situations I have encountered before.
FS3 *Foundation Stage 3*	In order to explore mathematical situations, carry out tasks or tackle problems, I first identify the mathematical aspects and obtain necessary information. I can calculate accurately, using ICT where appropriate. I check my working and results, considering whether these are sensible. I show understanding of situations by describing them mathematically using symbols, words and diagrams. I can draw simple conclusions of their own and explain their reasoning.
FS2 *Foundation Stage 2*	I can develop my 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, I check my results are reasonable by considering the context. I look for patterns and relationships, presenting information and results in a clear and organised way, using ICT appropriately. I can search for a solution by trying out ideas of my own.
FS1 Foundation Stage 1	I try different approaches and find ways of overcoming difficulties that arise when I am solving problems. I am beginning to organise my work and check results. I can discuss my mathematical work and am beginning to explain my thinking. I use and interpret mathematical symbols and diagrams. Students show that I understand a general statement by finding particular examples that match it.
PFS *Pre-Foundation Stage*	I use mathematics as an integral part of classroom activities. I can represent my work with objects or pictures and discuss it. I can recognise and use a simple pattern or relationship. I can select the mathematics I use in some classroom activities. I can discuss my work using mathematical language and am beginning to represent it using symbols and simple diagrams. I can explain why an answer is correct.

Maths – Number, Ratio, Proportion, Rates of Change and Algebra (Key Stage 3)

BFS *Beyond Foundation Stage*	I understand and can use rational and irrational numbers. I can determine the bounds of intervals. I understand and can use direct and inverse proportion. In simplifying algebraic expressions, I can use rules of indices for negative and fractional values. In finding formulae that approximately connect data, I can express general laws in symbolic form. I can solve simultaneous equations in two variables where one equation is linear and the other is quadratic.
FS5 *Foundation Stage 5*	I understand the effects of multiplying and dividing by numbers between 0 and 1. I understand and can use proportional changes, calculating the result of any proportional change using only multiplicative methods. I can find and describe in symbols the next term or nth term of a sequence where the rule is quadratic. I can use algebraic and graphical methods to solve simultaneous linear equations in two variables. I can solve problems that involve calculating with powers, roots and numbers expressed in standard form. I can manipulate algebraic formulae, equations and expressions, finding common factors and multiplying two linear expressions. I can sketch and interpret graphs of linear and quadratic. I am able to 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. I can evaluate algebraic formulae or calculate one variable, given the others, substituting fractions, decimals and negative numbers. I can solve inequalities in two variables. I can sketch and interpret graphs of cubic and reciprocal functions, and graphs that model real situations. I can solve simultaneous equations in two variables where both equations are linear. I can solve problems using intersections and gradients of graphs.
FS4 *Foundation Stage 4*	I can order and approximate decimals when solving numerical problems and equations, using trial and improvement methods. I understand and can use the equivalences between fractions, decimals and percentages, and calculate using ratios in appropriate situations. I can add and subtract fractions by writing them with a common denominator. I can formulate and solve linear equations with whole-number coefficients. I can represent mappings expressed algebraically, and use Cartesian coordinates for graphical representation interpreting general features. When making estimates, I am able to round to one significant figure and multiply and divide mentally. I can solve numerical problems involving multiplication and division with numbers of any size, using a calculator efficiently and appropriately.
FS3 *Foundation Stage 3*	I can use all four operations with decimals to two places. I can solve simple problems involving ratio and direct proportion. I can calculate fractional or percentage parts of quantities and measurements, using a calculator where appropriate. I can construct, express in symbolic form and use simple formulae involving one or two operations. I can use brackets appropriately. I can order and approximate decimals when solving numerical problems. I can evaluate one number as a fraction or percentage of another. I can find and describe in words the rule for the next term or nth term of a sequence where the rule is linear.
FS2 *Foundation Stage 2*	When solving number problems, I 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. I can select efficient strategies for addition, subtraction, multiplication and division. I am able to recognise approximate proportions of a whole and use simple formulae expressed in words. I can use my understanding of place value to multiply and divide whole numbers and decimals. I can order, add and subtract negative numbers in context. I can use and interpret coordinates in all four quadrants.
FS1 Foundation Stage 1	I am able to show understanding of place value in numbers up to 1000 and use this to make approximations. I am beginning to use decimal notation, in the context of measures and money, and to recognise negative numbers in practical contexts such as temperature. I can use mental recall of addition and subtraction facts to 20 in solving problems involving larger numbers. I can add and subtract numbers with two digits mentally and numbers with three digits using written methods. I can use mental recall of the 2, 3, 4, 5 and 10 multiplication tables and derive the associated division facts. I can solve whole-number problems involving multiplication or division including those that give rise to remainders. I can use simple fractions that are several parts of a whole and recognise when two simple fractions are equivalent. I am able to use my understanding of place value to mentally multiply and divide whole numbers by 10 or 100. When solving number problems, I use a range of mental methods of computation with the four operations, including mental recall of multiplication facts up to 10 x 10.
PFS *Pre-Foundation Stage*	I can count, order, combine, increase and decrease quantities when solving problems in practical contexts. I can read and write the numbers involved. I can count sets of objects reliably, and use mental recall of addition and subtraction facts to 10. I am beginning to understand the place value of each digit in a number and use this to order numbers up to 100. I can choose the appropriate operation when solving addition and subtraction problems. I am able to use the knowledge that subtraction is the inverse of addition. I can use mental calculation strategies to solve number problems involving money and measures. I recognise sequences of numbers, including odd and even numbers.

Maths – Space and Shape (Key Stage 3)

BFS *Beyond Foundation Stage*	I can sketch the graphs of the sine, cosine and tangent functions for any angle, and generate and interpret graphs based on these functions. I can use the sine, cosine and tangent of angles of any size, and Pythagoras' theorem when solving problems in two and three dimensions. I am able to construct formal geometric proofs. I can calculate the surface area of cylinders and volumes of cones and spheres.
FS5 *Foundation Stage 5*	I understand and am able to apply Pythagoras' theorem when solving problems in two dimensions. I can calculate lengths, areas and volumes in plane shapes and right prisms. I can enlarge shapes by a fractional scale factor, and am able to appreciate the similarity of the resulting shapes. I can determine the locus of an object moving according to a rule. I understand and am able to use congruence and mathematical similarity. I can use the sine, cosine and tangent ratios in right-angled triangles when solving problems in two dimensions. I can sketch the graphs of the sine, cosine and tangent functions for any angle. I can calculate the lengths of circular arcs and areas of sectors. I appreciate the continuous nature of scales that are used to make measurements.
FS4 *Foundation Stage 4*	I can solve problems using angles and symmetry, properties of polygons and angle properties of intersecting and parallel lines, and explain these properties. I can devise instructions for a computer to generate and transform shapes and paths. I understand and can use appropriate formulae for finding circumferences and areas of circles when solving problems. I 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. I understand and can use compound measures, such as speed.
FS3 *Foundation Stage 3*	When constructing models and drawing or using shapes, I can measure and draw angles to the nearest degree and use language associated with angles. I know the angle sum of a triangle and that of angles at a point. I can convert one metric unit to another. I understand and can use the formula for the area of a rectangle. I recognise and am able to use common 2-D representations of 3-D objects. I know and can use the properties of quadrilaterals. I can devise instructions for a computer to generate and transform shapes and paths. I understand and can use appropriate formulae for areas of plane rectilinear figures and volumes of cuboids when solving problems.
FS2 *Foundation Stage 2*	I can use and make geometric 2-D and 3-D patterns, scale drawings and models in practical contexts. I can find areas of simple shapes. I can identify all the symmetries of 2-D shapes. I can make sensible estimates of a range of measures in relation to everyday situations.
FS1 Foundation Stage 1	I can classify 3-D and 2-D shapes in various ways using mathematical properties such as reflective symmetry for 2-D shapes. I can use non-standard units, standard metric units of length including finding perimeters, capacity and mass, and standard units of time, in a range of contexts. I can reflect simple shapes in a mirror line. I am able to choose and use appropriate units and tools, interpreting, with appropriate accuracy, numbers on a range of measuring instruments.
PFS *Pre-Foundation Stage*	When working with 2-D and 3-D shapes, I am able to use mathematical language to describe properties and positions. I can measure and order objects using direct comparison, and order events. I can use mathematical names for common 3-D and 2-D shapes and describe their properties, including numbers of faces, edges and vertices. I can distinguish between straight and turning movements, recognise angle as a measurement of turn, and right angles in turns. I am beginning to use every day non-standard and standard units to measure length and mass.

Maths – Statistics (Key Stage 3)

BFS *Beyond Foundation Stage*	I understand how different methods of sampling and different sample sizes may affect the reliability of conclusions drawn. I can select and justify a sample and method to investigate a population. I recognise when and how to work with probabilities associated with independent, mutually exclusive events.
FS5 *Foundation Stage 5*	I can specify hypotheses and test them by designing and using appropriate methods that take account of variability or bias. I can determine the modal class and estimate the mean, median and range of sets of grouped data, selecting the statistic most appropriate to my line of enquiry. I understand relative frequency as an estimate of probability and can use this to compare outcomes of experiments. I can interpret and construct cumulative frequency tables and diagrams. I can estimate the median and interquartile range and use these to compare distributions and make inferences. I understand how to calculate the probability of a compound event and can use this in solving problems. I can interpret and construct histograms
FS4 *Foundation Stage 4*	I can draw conclusions from scatter diagrams, and have a basic understanding of correlation. I can 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, I can identify all the outcomes. When solving problems, I can use their knowledge that the total probability of all the mutually exclusive outcomes of an experiment is 1.
FS3 *Foundation Stage 3*	I can interpret graphs and diagrams, including pie charts, and draw conclusions. I can collect and record continuous data, choosing appropriate equal class intervals over a sensible range to create frequency tables. I can construct and interpret frequency diagrams. I can construct pie charts. I can find and justify probabilities and approximations to these by selecting and using methods based on equally likely outcomes and experimental evidence, as appropriate. I understand that different outcomes may result from repeating an experiment.
FS2 *Foundation Stage 2*	Using technology where appropriate, I can group data in equal class intervals if necessary, represent collected data in frequency diagrams and interpret such diagrams. I understand and can use the mean of discrete data. I can compare two simple distributions using the range and one of the mode, median or mean. I understand and can use the probability scale from 0 to 1.
FS1 Foundation Stage 1	I can extract and interpret information presented in simple tables and lists. I can construct charts and diagrams to communicate information I have gathered for a purpose, and I can interpret information presented to me in this form. I can generate and answer questions that require the collection of discrete data which I am then able to record using a frequency table. I understand and can use an average and range to describe sets of data. I can construct and interpret simple line graphs.
PFS *Pre-Foundation Stage*	I can sort objects and classify them, demonstrating the criterion I have used. I can collect data to answer questions. I can sort objects and classify them using more than one criterion. When I have gathered information to answer a question or explore a situation, I am able to record results in simple lists, tables, diagrams and block graphs, in order to communicate my findings.

PE (Key Stage 3)

	Knowledge	Demonstrate skills	Decision Making & Application	Evaluation
FS5 *Foundation Stage 5*	I am able to link a range of knowledge and understanding from key areas such as rules, skills, fitness, etc.	I perform skills consistently when under pressure, starting to influence a game.	I create opportunities to dominate in performances, effectively winning games.	I can explain strengths and areas to develop, looking for patterns in performance. I can give recommendations to improve performance through skills practices.
FS4 *Foundation Stage 4*	I have a broad range of knowledge and understanding from key areas such as rules, skills, fitness, etc.	I can demonstrate skills with various levels of consistency. I choose the appropriate skill in most situations. I am starting to be effective in a game.	I am starting to select appropriate tactics to bring about change in performance. I am able to respond to my opponents' actions successfully.	I am able to explain the impact that strengths and areas to develop have on a game and suggest improvements.
FS3 *Foundation Stage 3*	I understands key terms and knowledge points and am able summarise learning.	I am able to demonstrate skills in competitive situations. I may only be able to demonstrate or repeat a basic skill.	I attempt to adapt my performance to an opponent with some success. I can apply tactical changes in response to my opponents' actions (with some errors).	I am able to identify my own and others' strengths and areas to develop in a game or conditioned game.
FS2 *Foundation Stage 2*	I can identify basic knowledge points: key terms, rules, techniques etc.	I can perform basic skills in isolation; these sometimes may break down when under pressure.	I make misjudgements. I can apply tactical changes but not successfully. I am not able to capitalise on my opponents' weaknesses.	I am able to identify my own and others strengths and areas to develop during isolated practice.
FS1 Foundation Stage 1	I can recall basic information such as teaching points, basic rules, etc.	My basic skills are lacking in technical accuracy and timing. I may need extra support.	I struggle to respond to playing / performing conditions. I fail to create openings to take on opportunities.	I can identify some personal strengths and areas to develop in my own performance.

Science – Biology (Key Stage 3)

BFS *Beyond Foundation Stage*	I demonstrate both breadth and depth of knowledge and understanding of organisms, their behaviour and the environment. I apply this effectively in my descriptions and explanations, for example; explaining the advantage of different forms of chlorophyll for photosynthesis. I can explain why different types of cells contain different organelles. For example, the need for muscle cells to contain many mitochondria. I interpret, evaluate and synthesise data, from a range of sources in a range of contexts, and apply my understanding to a wide range of biological systems. I demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence gathering, for example in the study of global climate change through manipulating data to identify trends and suggest correlation between data. I describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts, such as addressing problems arising from global climate change, explaining in detail the impact on environment, economic and social issues arising.
FS5 *Foundation Stage 5*	I demonstrate extensive knowledge and understanding related to organisms, their behaviour and the environment. I use and apply this effectively in my descriptions and explanations, identifying links between topics, for example relating cellular structure of organs to their associated life processes and how organ systems work together for the functioning of the human body for example the circulatory and respiratory systems. I interpret, evaluate and synthesise data from a range of sources and in a range of contexts, for example 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. I show I 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. I can explain how scientific ideas have changed, based on experimental evidence, for example Van Helmont. I can describe and explain the importance of a wide range of applications and implications of science, such as relating photosynthesis and respiration to the cycling of carbon.
FS4 *Foundation Stage 4*	I can describe a wide range of processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology and sequencing a number of points, for example recalling the balanced symbol equation for respiration and photosynthesis and drawing a pyramid of numbers and biomass using data provided. I can make links between different areas of science in their explanations. I can apply and use more abstract knowledge and understanding, in a range of contexts, such as inherited and environmental variation. I can explain the use of enzymes in digestion and give an example of an enzyme in the human body. I can describe how carbon can move between living organisms and the atmosphere. I can explain how evidence supports some accepted scientific ideas, such as the structure and function of cells. I can explain, using abstract ideas where appropriate, the importance of some applications and implications of science for example the implication of antibiotic resistance on health care.
FS3 *Foundation Stage 3*	I can describe processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology, for example simple cell structure and function. I can use the word equation for photosynthesis and respiration. I take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as environmental factors affecting the distribution of organisms in habitats. I can describe how a model lung can explain the mechanism of breathing and its importance for providing a reactant needed for respiration. I can apply and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. I can identify the different organs within an organism and use them to explain the different organ systems and their importance. I can describe some evidence for some accepted scientific ideas, such as the causes of variation between living things for example; the research done by Watson and Crick. I can make a comparison between creationism and evolution and the evidence for each described. I can explain the importance of some applications and implications of science, such as the use of selective breeding,
FS2 *Foundation Stage 2*	I can describe the processes and phenomena related to organisms, their behaviour and the environment, drawing on abstract ideas and using appropriate terminology, for example the main functions of plant and animal organs and how these functions are essential and give examples of organ systems which could include; the circulatory, respiratory and digestive system for animals and the main organs of a flowering plant related to reproduction. I can explain processes and phenomena, in more than one step or using a model. I can apply and use knowledge and understanding in familiar contexts, such as different organisms being found in different habitats because of differences in environmental factors, for example give a range of reasons why a camel can live in a hot environment and a polar bear to live in a cold environment. I can describe applications and implications of science, such as solving some of the health problems that arise when organ damage occurs.
FS1 Foundation Stage 1	I can describe some processes and phenomena related to organisms, their behaviour and the environment, drawing on scientific knowledge and understanding and using appropriate terminology, for example using food chains to describe feeding relationships in terms of transfer of energy between plants and animals in a habitat and plants requiring sunlight as a producer in order to be the source of chemical energy for other organisms for respiration. I can recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things.
PFS	I can use my knowledge about living things to describe the basic conditions [for example, a supply of food, water, air, light] that animals and plants need in order to survive. I recognise that living things grow and reproduce through the study of plant, animal reproduction. I can name the main organs involved in plant and animal reproduction. I can sort living things into groups, using simple features. I can describe the basis for my groupings [for example, number of legs, shape of leaf], identifying objects as living or non-living using MRSGREN. I recognise that different living things are found in different places [for example, ponds, woods]. I can use my knowledge and understanding of basic life processes [for example, growth, reproduction] when I describe differences between living and non-living things.

Science – Chemistry (Key Stage 3)

BFS	I demonstrate both breadth and depth of knowledge and understanding of various different chemical processes. I can interpret, evaluate and synthesise data from a range of sources in a range of contexts, and apply my understanding to a wide range of chemical systems, such as explaining chemical behaviours that do not fit expected patterns. I can demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence-gathering. I can describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts.
FS5 *Foundation Stage 5*	I can demonstrate extensive knowledge and understanding related to materials, their properties and the Earth. I use and apply this effectively in my descriptions and explanations, identifying links between topics, for example: I link understanding of atoms and bonds with energy and temperature changes to describe reactions as exothermic or endothermic, I use ideas about particles and energy to explain why increasing temperature speeds up the rate of a chemical reaction. I can describe and explain the process of continental drift. I can represent common compounds by chemical formulae and use these formulae to form balanced symbol equations for reactions. I can show I 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.
FS4 *Foundation Stage 4*	I can 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. I can make links between different areas of science in my 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. I can 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, and using balanced symbol equations to represent chemical reactions. I can explain how evidence supports some accepted scientific ideas, such as reactions of metals with acid or water support the reactivity series of metals. I can 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.
FS3 *Foundation Stage 3*	I can describe processes and phenomena related to materials, their properties and the Earth, using abstract ideas and appropriate terminology, for example; describing changing state in terms of particles, describing observations of a chemical reaction and state what causes these observations, describing a pattern in reactivity by drawing on the outcomes of displacement reactions, describing elements as solid, liquid or gases based on melting and boiling points, 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, and using chemical formula to deduce the elements present and the number of atoms. I can explain the importance of some applications and implications of science.
FS2 *Foundation Stage 2*	I can describe processes and phenomena related to materials, their properties and the Earth, drawing on abstract ideas and using appropriate terminology, for example; 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, and identifying an acid or alkali using indicators. I can explain processes and phenomena, in more than one step or using a model, such as drawing a shell diagram to represent an atom, when provided with the names of reactants and products, constructing a word equation to show what happens in a chemical reaction, and explaining melting, evaporating etc. using the particle model. I can 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 and the fact that patterns helped Mendeleev develop the periodic table. I can describe applications and implications of science.
FS1 Foundation Stage 1	I can recall keywords when supplied with a definition. I can 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 observations of a chemical reaction, and describing properties e.g. malleable, brittle, high melting point etc. I recognise that evidence can support or refute scientific ideas, such as; the classification of reactions as reversible and irreversible.. I can use chemical tests (e.g. limewater) to identify products made in a chemical reaction. I understand that an increase in temperature supports the idea that chemical reactions release energy.
PFS	I can identify a range of common materials and know about some of their properties. I can describe similarities and differences between materials. I can sort materials into groups and describe the basis for my groupings in everyday terms [for example, shininess, hardness, smoothness]. I can 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.

Science – Physics (Key Stage 3)

BFS *Beyond Foundation Stage*	I can demonstrate both breadth and depth of knowledge and understanding of energy, forces and space. I apply this effectively in my descriptions and explanations, identifying links and patterns within and between topics, for example understanding how models like the particle model are useful in explaining physical phenomena. I can interpret, evaluate and synthesise data from a range of sources in a range of contexts and apply their understanding to a wide range of data on energy efficient physical systems. I can demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence gathering, for example through the role of artificial satellites and probes in communications and space exploration and theories about the start of the universe. I can describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts, such as alternative methods of electricity generation.
FS5 *Foundation Stage 5*	I can demonstrate extensive knowledge and understanding related to energy, forces and space, for example the passage of sound waves through a medium or the flow of current in a parallel circuit. I use and apply this effectively in their descriptions and explanations, identifying links between topics. I can interpret, evaluate and synthesise data from a range of sources and in a range of contexts. I can show I understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed. I can describe and explain the importance of a wide range of applications and implications of science, such as relating the dissipation of energy during energy transfer to the need to conserve limited energy resources. I can carry out multi-step calculations e.g. F=MA
FS4 *Foundation Stage 4*	I can describe a wide range of processes and phenomena related to energy, forces and space, using abstract ideas and appropriate terminology and sequencing a number of points, for example how energy is transferred by radiation or by conduction. I can apply and use more abstract knowledge and understanding in a range of contexts, such as the appearance of objects in different colours of light. I can explain how evidence supports some accepted scientific ideas, such as the role of gravitational attraction in determining the motion of bodies in the solar system. I can explain, using abstract ideas where appropriate, the importance of some applications and implications of science.
FS3 *Foundation Stage 3*	I can describe the processes and phenomena related to energy, forces and space, using abstract ideas (I give the idea not given in question or shown on graph) and appropriate terminology, for example: electric current as a way of transferring energy. I take account of a number of factors in my explanations of processes and phenomena, for example increased strength electromagnet because of number or turns or current or iron core. I can also use abstract ideas or models, for example sustainable energy sources. I can apply and use knowledge and understanding in unfamiliar contexts. E.g. conduction in penguins feet. I can describe some evidence for some accepted scientific ideas, e.g. conservation of energy such as the transfer of energy by light, sound or electricity. I can explain the importance of some applications and implications of science, such as the responsible use of unsustainable sources of energy.
FS2 *Foundation Stage 2*	I can describe processes and phenomena related to energy, forces and space, drawing on abstract ideas (an idea given in the question or reading off a graph) and using appropriate terminology, for example 'balanced forces' or 'unbalanced forces. I can explain processes and phenomena, using a model, such as the length of a day or a year. I can apply and use knowledge and understanding in familiar contexts e.g. moments on a see saw. I recognise that both evidence and creative thinking contribute to the development of scientific ideas, such as objects being seen when light from them enters the eye. I can describe applications and implications of science, such as the ways sound can be produced and controlled, for example in musical instruments.
FS1 Foundation Stage 1	I can describe some processes and phenomena related to energy, forces and space, drawing on scientific knowledge and understanding and using appropriate terminology, for example: the observed position of the sun in the sky over the course of a day. I recognise some applications and implications of science, such as: the use of electrical components to make electrical devices, how magnetic fields and moving wires generate electricity in power stations, linking density to materials needed to make boats, and linking sound topic to how ear defenders work.
PFS *Pre-Foundation Stage*	I can communicate observations of changes in light, sound or movement that result from actions for example: switching on a simple electrical circuit, and pushing and pulling objects. I recognise that sound and light come from a variety of sources and name some of these for example TV, radio, torches, the sun and people. I know about a range of physical phenomena and recognise and describe similarities and differences associated with them for example sound, light and water waves. I can compare the way in which devices, for example bulbs, motors and resistors, work in different electrical circuits. I can compare the brightness or colour of lights, the loudness or pitch of sounds from looking at a waveform and the current or voltage from looking at ammeters or voltmeters. I can compare the movement of different objects in terms of speed or direction. I use my knowledge and understanding of physical phenomena to link cause and effect in simple explanations for example, a bulb failing to light because of a break in an electrical circuit, 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. I am beginning to make simple generalisations about physical phenomena for example, explaining that sounds they hear become fainter the further they are from the source.