BROOK LEARNING TRUST

SUPPORTING SCHOOLS INSPIRING EXCELLENCE

KS3 Assessment Steps

September 2016

THE Ebbsfleet ACADEMY
Aspire, Excel

THE HIGH WEALD ACADEMY

An Introduction to our new KS3 Assessment Steps

In 2014, the Department for Education devised a new National Curriculum and removed the old system of National Curriculum Levels for pupils in Primary Schools and in Year Seven, Eight and Nine of secondary education. Since then schools and academies have been working to develop new and better ways to assess progress and attainment and to communicate this in a more helpful way to pupils and their parents so that they know how well they are doing and how to improve.

The Brook Learning Trust has responded to these changes and has developed a system of Key Stage Three (KS3) assessment that uses subject specific criteria based on the key knowledge and skills that will build towards success at the end of Key Stage Four.

Our Steps assessment framework:

- Builds on the new KS2 National Curriculum
- Allows for progression through the new KS3 National Curriculum
- Prepares students for the new KS4 curriculum
- Is written in language that is easily understood by students, parents and teachers
- Supports formative and summative assessment, helping pupils understand how to improve and helping teachers to plan for and assess this improvement

We believe all pupils are capable of making great progress and use assessment to support our pupils to achieve. In our Steps framework student attainment will be assessed against descriptors. The descriptors for each subject discipline are found in this booklet.

Each 'Step' describes the skills, knowledge and understanding within the KS3 curriculum that students must master by the end of KS3, in order to be on-track for a given GCSE Level by the end of Year 11. For example, if a student achieves Step 5 in Mathematics by the end of KS3 then the expectation is for a good pass, that is a GCSE grade 5, at the end of KS4.

From September 2016, the tracking of pupil progress and attainment and reporting to parents will follow the KS3 1-9 system.

September 2016

KS3 Assessment Steps

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KS3 Assessment Steps - Art		
	Skills	**Understanding**
Step 9	• Highly developed ability to independently use all formal elements eg: 2D and 3D skills are highly refined and consistent • Explores a broad range of ideas independently demonstrating an exceptionally high level of creativity and imagination • Able to skilfully experiment and discriminate purposefully with a range of media • Clear evidence of taking creative risks	• Able to independently analyse artists' work using sophisticated subject specialist vocabulary, demonstrating cultural understanding • Highly developed ability to evaluate own and others work using sophisticated subject specialist vocabulary • Can produce a meaningful and skilful personal response when realising intentions with clear visual and written links to development work
Step 8	• Highly developed ability to independently use all formal elements eg: 2D and 3D skills are refined and consistent • Explores a broad range of ideas independently demonstrating a high level of creativity and imagination • Able to experiment and discriminate purposefully with a range of media demonstrating a high level quality and accuracy • Have started to take creative risks	• Able to analyse artists' work using appropriate detailed subject specialist vocabulary, demonstrating cultural understanding • Ability to evaluate own and others work using appropriate subject specialist vocabulary and is communicated with fluency and accuracy • Can produce a skilful personal response with clear visual and written links to development work
Step 7	• Confident and consistent ability to use all formal elements to a high standard eg: 2D and 3D skills • Explores a broad range of ideas demonstrating a high level of creativity and imagination • Able to experiment purposefully with a broad range of media demonstrating quality and accuracy	• Able to analyse artists' work using appropriate detailed subject specialist vocabulary • Ability to evaluate own and others work using appropriate subject specialist vocabulary and is communicated with fluency and accuracy • Can produce a personal response with clear visual and written links to development work
Step 6	• Competent and consistent ability to use all formal elements eg: 2D and 3D skills • Explores a range of ideas demonstrating a good level of creativity and imagination • Able to experiment purposefully with a range of media demonstrating accuracy	• Able to analyse artists' work using appropriate subject specialist vocabulary • Ability to evaluate own and others work using appropriate subject specialist vocabulary • Can produce a personal response with clear visual and written links to development work
Step 5	• Competent and consistent ability to use most formal elements eg: 2D and 3D skills • Explores a range of ideas demonstrating a good level of creativity and imagination • Able to experiment purposefully with a range of media	• Able to analyse artists' work using some subject specialist vocabulary • Ability to evaluate own and others work using some subject specialist vocabulary • Can produce a personal response with clear links to development work
Step 4	• Competent ability to use most formal elements eg: 2D and 3D skills • Explores a range of ideas demonstrating some level of creativity and imagination • Able to experiment with a range of media	• Able to explain artists' work using basic subject specialist vocabulary • Ability to evaluate own and others work using basic subject specialist vocabulary • Can produce a personal response with some links to development work
Step 3	• Some ability to use the formal elements eg: 2D and 3D skills • With support can explore a range of ideas demonstrating a limited level of creativity and imagination • Able to experiment with a limited range of media • Development work is inconsistent in ideas and/or quality	• Able to describe artists' work using basic key words • With support can evaluate own and others work using basic subject specialist vocabulary • Can produce a personal response with limited links to development work
Step 2	• Limited ability to use the formal elements eg: produce a basic line drawing and use basic flat colour • With support can explore some ideas demonstrating a limited level of skill • With support, able to use a limited range of media	• Able to identify elements of artists' work • With support can state a strength and weakness in their own and others work • Limited ability to produce a response
Step 1	• Minimal ability to use the formal elements eg: produce a basic line drawing and use basic flat colour • With support can explore some ideas demonstrating a minimal level of skill • Able to use a minimal range of media	• Able to identify basic elements of artists' work • With support can state a strength and weakness in their own work • Minimal ability to produce a response

KS3 Assessment Steps - Computing			
	Digital Literacy **(Online Safety)**	**Information Technology** **(IT Applications)**	**Computer Science**
Step 9			**Algorithms:** • The choice of an algorithm should be influenced by the data structure and data values that need to be manipulated • Understand standard searching algorithms - binary search, linear search • Understand standard sorting algorithms - bubble sort, merge sort, insertion sort **Visual Programming / Textual Programming:** • Manipulation of logical expressions, eg: truth tables and Boolean valued variables. Two-dimensional arrays (and higher) • Procedures that call procedures, to multiple levels. (Building one abstraction on top of another) • Programs that read and write persistent data in files **Abstractions:** • Develop and apply analytic, problem-solving, design, and computational thinking skills – abstraction, decomposition, algorithmic thinking **Binary & Data Representation:** • Understand how numbers can be represented in binary and be able to carry out simple operations on binary numbers, eg: binary addition, conversion between binary and decimal **Hardware & Networks** • Understand the components that make up digital systems, how they communicate with one another and with other systems • Compare wired and wireless networks • Explain network topologies and protocols
Step 8		• Analyse ethical, legal, cultural and environmental concerns • Be discerning in evaluating digital content	**Algorithms:** • Know how to interpret, validate, test, correct or complete algorithms **Visual Programming / Textual Programming:** • Documenting programs helps explain how they work **Abstractions:** • Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems **Data Handling:** • Evaluate the effectiveness of a model
Step 7		• Analyse the impact of digital technology to the individual and to wider society • Provide detailed evaluation of digital content	**Algorithms:** • Use logical reasoning to compare the utility of alternative algorithms for the same problem **Visual Programming / Textual Programming:** • Create, test and evaluate programs against user requirements **Abstractions:** • Use computational abstractions **Hardware & Networks:** • Understand how computer networks can provide multiple services, eg: email, instant messaging
Step 6		• Undertake creative projects that include collecting and analysing data and meeting the needs of known users • Understand that digital technology affects wider society • Provide simple evaluation of digital content	**Algorithms:** • Understand several key algorithms that reflect computational thinking **Visual Programming / Textual Programming:** • Design and develop more complex modular programs that use procedures or functions • Solve problems by decomposing them into smaller parts in a language • Make appropriate use of complex data structures, eg: arrays **Binary & Data Representation:** • Understand how text, images and sound can be represented digitally in the form of binary numbers, eg: 2 bit image **Data Handling:** • Model a complex real world system with feedback

KS3 Assessment Steps - Computing

	Digital Literacy (Online Safety)	Information Technology (IT Applications)	Computer Science
Step 5	• Protect online identity and privacy • Use search technologies effectively	• Analyse data and information • Select and combine a variety of software to accomplish given goals • Create, re-use, revise and re-purpose digital artefacts for a given audience	**Algorithms:** • Understand that algorithms may be decomposed into component parts (procedures), each of which itself contains an algorithm • Use logical reasoning to explain how some simple algorithms work • Use logical reasoning to detect and correct errors in algorithms • Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems • Know how to produce algorithms using pseudocode **Visual Programming / Textual Programming:** • Use input and output, selection, variables and data types • Debug programs that accomplish specific goals **Hardware & Networks:** • Understand computer networks including the Internet, ie: data transfer **Data Handling:** • Model a simple real world system with inputs and outputs
Step 4	• Understand how changes in technology affect safety • Recognise inappropriate content, contact and conduct and know a range of ways to report concerns	• Collect appropriate data	**Algorithms:** • Understand that algorithms are implemented as programs on digital devices • Write algorithms with care and precision to avoid errors and ambiguity (flowcharts) • Recognise that different processes have different levels of efficiency **Visual Programming / Textual Programming:** • Design and create simple programs that accomplish specific goals • Make appropriate use of basic data structures, eg: lists, tables • Use various forms of input and output in a language • Debug simple programs in a language **Boolean:** • Understand simple Boolean logic (eg: AND, OR and NOT) and some of its uses in circuits and programming **Binary & Data Representation:** • Know how numbers can be represented in binary and how this applies to computer circuitry **Hardware & Networks:** • Understand computer networks including the Internet • Understand how computer systems communicate with other systems
Step 3	• Understand a range of ways to use technology securely, eg: password strength, document protection	• Understand the opportunities networks offer for communication and collaboration • Use software to accomplish given goals, eg: choose appropriate software	**Algorithms:** • Understand that algorithms are a sequence of precise steps to solve a given problem/achieve goals • Understand that programs execute by following clear, precise instructions • Explain that algorithms can include selection (if) and repetition (loops) • Develop algorithms according to a plan and test them • Correct algorithms if they fail tests • Solve problems by decomposing them into smaller parts • Use sequence, selection, and repetition in programs • Work with variables **Visual Programming / Textual Programming:** • Identify inputs and outputs in a visual/textual language (KODU, Scratch) **Binary & Data Representation:** • Know how numbers can be represented in binary **Hardware & Networks:** • Know the hardware and software components that make up computer systems

KS3 Assessment Steps - Computing			
	Digital Literacy **(Online Safety)**	**Information Technology** **(IT Applications)**	**Computer Science**
Step 2	• Recognise acceptable/unacceptable online behaviour • Use simple search technology	• Organise files on the network • Collect data	• Understand algorithms can be represented symbolically (flowcharts) • Understand that algorithms can be represented in a clearly defined language (turtle graphics) • Use sequence and selection in programs • Work with various forms of input and output • Understand that steps can be repeated
Step 1	• Use technology safely, respectfully and responsibly • Understand the basic security measures, eg: not sharing passwords • Identify how to report concerns about content and contact and where to go for help, eg: CEOP, report abuse buttons, in-school support	• Recognise common uses of information technology beyond school, eg: VLE, digital devices, websites • Load and save files on the network	• Understand that a sequence is a set of steps • Understand computers need specific instructions • Know how to create a sequence of steps to do something • Describe everyday activities that can be followed by humans and by computers • Explain that computers need more precise instructions than humans do

KS3 Assessment Steps – Design & Technology				
	Investigate	**Design & Develop**	**Make, Test & Evaluate**	**Test & Evaluate**
Step 9	• Discrimination shown when selecting and acquiring relevant research. Students demonstrate a high level of detail within their analysis	• Unique, imaginative and innovative ideas have been presented, demonstrating a creativity, flair and originality that consider SMSC issues • Materials/ingredients have been selected with regard to their working properties • Excellent development work through experimentation with a variety of techniques and modelling (including CAD where appropriate) in order to produce a detailed final design solution	• Work independently to produce challenging and demanding outcomes of high quality • Use appropriate tools safely and with confidence and skill • Excellent evidence of quality control	• Detailed testing and evaluation has been completed • A detailed evaluation that covers a range of points has been completed • A detailed and realistic range of improvements and justifications are given for possible modifications
Step 8	• Some discrimination shown when selecting and acquiring relevant research. Students demonstrate a high level of detail within their analysis	• Unique, imaginative and innovative ideas have been presented, demonstrating a degree of creativity, flair and originality that consider SMSC issues • Consideration has been given to materials/ingredients with regard to their working properties • Excellent development work through experimentation with a variety of techniques and modelling (including CAD where appropriate) in order to produce a final design solution	• Work independently to produce final outcomes of high quality • Use appropriate tools safely and with some confidence and skill • Good evidence of quality control	• Detailed testing and evaluation has been completed • A detailed evaluation that covers a range of points has been completed • A detailed range of improvements and justifications are given for possible modifications
Step 7	• Some focus shown when selecting and acquiring relevant research. Students demonstrate a high level of detail within their analysis	• Imaginative and innovative ideas have been presented clearly, demonstrating a degree of creativity, flair and originality that consider SMSC issues • Consideration has been given to materials/ingredients with regard to their working properties • Good development work through experimentation with a variety of techniques and modelling (including CAD where appropriate) in order to produce a final design solution	• Work independently to make a good final outcome that shows care and accuracy • Use appropriate tools safely and with some skill • Evidence of quality control	• Detailed testing and evaluation has been completed • A detailed evaluation that covers a range of points has been completed • A good range of improvements and justifications are given for possible modifications
Step 6	• Has conducted relevant research. Students demonstrate a higher level of detail within their analysis	• Imaginative and innovative ideas have been presented, demonstrating some degree of creativity, flair and originality that consider some SMSC issues • Consideration has been given to materials/ingredients with some regard to their working properties • Good development work through experimentation with a variety of techniques and modelling (including CAD where appropriate) in order to produce a final design solution	• Work independently to make a final outcome • Use appropriate tools safely and with some skill • Evidence of quality control	• Appropriate testing has been completed and shows some detail • The evaluation covers a range of points and shows some detail • A good range of suggestions and justifications are given for possible improvements

	KS3 Assessment Steps – Design & Technology			
	Investigate	**Design & Develop**	**Make, Test & Evaluate**	**Test & Evaluate**
Step 5	• Has conducted relevant research. Students demonstrate a good level of detail within their analysis	• Ideas have been clearly presented, demonstrating some degree of creativity, flair and originality that consider some SMSC issues • Consideration has been given to materials/ingredients with some regard to their working properties • Development work has been completed through experimentation with some variety of techniques and modelling (including CAD where appropriate) in order to produce a final design solution	• Most of the final outcome has been made independently • Use appropriate tools safely and with some skill • Some evidence of quality control	• Some effective testing has been completed and recorded • The evaluation covers a range of different points • There are a range of suggested improvements that have been justified
Step 4	• Has conducted some relevant research, demonstrating some level of detail within their analysis	• Ideas have been presented, demonstrating some degree of originality that consider some SMSC issues • Consideration has been given to materials/ingredients with some regard to their working properties • Development work has been completed through experimentation with limited techniques and modelling (including CAD where appropriate) in order to produce a final design solution	• Show some independence to make a final outcome with some evidence of good quality • Use appropriate tools safely • Some evidence of quality control	• Some effective testing has been completed and recorded • The evaluation covers a range of different points • There are a range of suggested improvements stated
Step 3	• Has conducted some relevant research, some analysis has been evidenced	• Most ideas have been presented, demonstrating some degree of originality. Some consideration has been given to materials/ingredients with some regard to their working properties • Some development work has been completed, demonstrating some degree of experimentation with some modelling (including CAD where appropriate) in order to produce a final design solution	• Work with support to make a final outcome with some evidence of accuracy • Use appropriate tools safely • Some basic quality control	• Some testing has been completed and recorded in a suitable format • The evaluation covers some different points • There are some suggestions for improvements
Step 2	• Investigations are basic and have some relevance	• Some ideas have been presented clearly. Basic consideration has been given to materials/ingredients, with basic regard to their working properties • Development work is limited, only showing simple changes	• Work with support to make a final outcome, using appropriate tools safely	• Some testing has been completed • The product has briefly been evaluated • There are 1 or 2 suggested improvements
Step 1	• Will have produced limited investigations	• Ideas have been presented unclearly. Limited consideration has been given to materials/ingredients • A final design solution has been presented	• Work with support to make a simple final outcome, using tools safely	• Brief testing has been completed • The product has been briefly evaluated • There is a suggested improvement

KS3 Assessment Steps - English		
	Reading	**Writing**
Step 9	• Summarise showing clear understanding of 2 texts in a precise way, making points that are clear and concisely expressed, using ambitious words accurately and precisely throughout to give precise meaning • Critically evaluate what is read, showing a detailed and perceptive understanding of the text • Understand and respond with insight to explicit and implicit information • Perceptively analyse and justify how a writer has used structure to make the text effective • Perceptively analyse specific words, phrases and grammatical choices made by the writer, speculatively explaining the effects of these in detail • Show understanding and opinions by selecting multiple illuminating references that are precisely embedded • By making illuminating links to context, perceptively evaluate writers' choices • Make convincing, insightful and fully developed links and comparisons between texts	• Writing is convincing and compelling throughout • Writing is sharply focused and the reader is communicated to with subtlety, sustaining influence • Writing is precisely constructed and organised, with seamless links between paragraphs • Use a complex range of sentence types and structures with flair, varying sentences precisely for both cohesion, meaning and effect • Correctly use the full range of punctuation marks to create an effect on the reader • Increasingly sophisticated vocabulary and phrasing, chosen for effect with a range of highly apt linguistic devices • Spell an extensive range of words with a high level of accuracy and consistently throughout the writing, including irregular and unfamiliar words
Step 8	• Summarise texts in a precise way, making points that are clear and concisely expressed, using own words selectively throughout to give precise meaning • Critically evaluate what is read, showing a detailed and perceptive understanding of the text • Understand and respond with insight to explicit and implicit information • Critically analyse and justify how a writer has used structure to make the text effective • Critically analyse specific words, phrases and grammatical choices made by the writer, explaining the effects of these in detail • Show understanding and opinions by selecting multiple illuminating references that are precisely embedded • By making illuminating links to context, evaluate writers' choices • Make convincing, insightful and fully developed links and comparisons between texts	• Writing is ambitious and accomplished • Writing is sharply focused and the reader is communicated to with impact and influence • Writing is precisely constructed and organised, with highly effective links between paragraphs • Use a complex range of sentence types and structures, varying sentences precisely for both cohesion, meaning and effect • Correctly and precisely use the full range of punctuation marks to create the intended effect on the reader • Choose vocabulary deliberately and precisely to create an effect on the reader and use an extensive selection of words and successful use to linguistic devices • Spell an extensive range of words accurately and consistently throughout the writing, including irregular and unfamiliar words
Step 7	• Summarise texts in a focused way, with points made clearly and concisely expressed, using own words selectively throughout • Evaluate what is read, sometimes critically, showing an accurate and personal understanding of the text • Understand and respond critically with some insight to explicit and implicit meaning • Analyse and justify how a writer has used structure to make the text effective given its purpose • Analyse specific words, phrases and grammatical choices made by the writer and explore the effects of these in detail, identifying a range of techniques • Show understanding and opinions by selecting illuminating references that are precisely embedded • By making illuminating links to context analyse writers' choices • Make convincing and developed links and comparisons between texts	• Writing is ambitious and mostly accomplished • Writing is focused and the reader is communicated to with impact • Writing is thoughtfully constructed and organised, with effective links between paragraphs • Use an emerging range of complex sentence types and structures, varying sentences for both cohesion, meaning and effect • Correctly use the full range of punctuation marks to create an effect on the reader with few errors • Choose vocabulary deliberately to create an effect on the reader and use an extensive selection of words with some use of linguistic devices • Spell a wide range of words accurately throughout, with some errors in irregular and unfamiliar words

	KS3 Assessment Steps - English	
	Reading	**Writing**
Step 6	• Summarise texts in a focused way with most points made clearly and concisely, using own words consistently throughout • Analyse what is read, showing an accurate and detailed understanding of the text • Understand and analyse thoroughly explicit and implicit meaning • Discuss and justify how a writer has used structure to make the text effective given its purpose • Analyse specific words, phrases and grammatical choices made by the writer and confidently explain the effects of these, identifying a range of techniques • Selecting short and precise, embedded references to support own ideas and opinions that are highly relevant • By making relevant links to context comment on writers' choices • Make credible and appropriate links and comparisons between texts	• Writing is coherent and purposeful • Writing is focused with effective communication that sustains the reader's interest • Writing is well constructed and organised with effective links between paragraphs • Use a wide range of sentence types and structures, varying sentences for meaning and effect on the reader • Use of a wide range of punctuation marks to create an effect on the reader with occasional errors in the use of punctuation • Choose vocabulary deliberately to create an effect on the reader and use of a wide selection of words and linguistic devices • Spell all familiar and most complex words accurately
Step 5	• Summarise texts in a way which is focused. Many of the points made are concise and own words mostly used • Explain what is read, showing an accurate and sometimes deep understanding of the text • Understand and respond to explicit information and examine implicit meaning • Discuss and explain how a writer has used structure to make the text effective • Examine a range of words, phrases and grammatical choices made by the writer and can explain the effects of some of these, identifying a range of techniques • Selecting short and precise, embedded references to support own ideas and opinions • By making relevant links to context begin to comment on writers' choices • Make relevant links and comparisons between texts	• Writing is coherent and mostly purposeful • Writing is mostly focused and communication with the reader is effective and clear to gain the reader's interest • Writing is well constructed, with effective paragraphing • Use a competent range of sentence types and structures, varying sentences for meaning • Use of a range of punctuation marks to create an effect on the reader with some errors with more complex punctuation • Use ambitious vocabulary to create an effect on the reader and use a good selection of words and linguistic devices • Spell all familiar and most complex words accurately, with some occasional errors
Step 4	• Summarise texts in way which is mainly focused. Some of the points made are concise, however, occasionally words and phrases are copied • Describe most of what is read, showing an accurate understanding of the text • Understand and respond to explicit and implicit meaning • Explain how a writer has used structure in the text • Examine and explain some words, phrases and grammatical choices made by the writer and attempt to explain the effect of these, identifying some techniques where appropriate • Selecting relevant references that are able to support own ideas and opinions • Show ideas and opinions by making relevant links to context • Make relevant links and begins to make comparisons between texts	• Writing is competent and shows an awareness of the purpose of the writing • Writing is mostly focused and communication with the reader is clear and competent • Writing is mostly well-constructed with some effective paragraphing. • Use of a competent range of sentence types and structures • Use of a range of punctuation marks to create an effect on the reader with occasional errors • Use of vocabulary with some ambition to create an effect on the reader and use of a competent selection of words and occasional use of linguistic devices • Spell familiar words accurately, however there are errors with more complex words

	KS3 Assessment Steps - English	
	Reading	**Writing**
Step 3	• Summarise texts with occasional relevance. A few of the points made are concise. Too much reliance is placed on copying words and phrases from the text • Show some understanding of the main features of the text • Understands and responds to explicit information and occasionally is able to identify implicit meaning • Begin to explain how a writer has used structure in the text • Make some relevant comments about words, phrases and grammatical choices made by the writer, identifying some techniques • Selecting references in an attempt to support opinion • Make some relevant comments about context • Make some relevant links between texts and can make an occasional comparison	• Writing is competent and sometimes shows an awareness of the purpose of the writing • Writing is often focused and communication with the reader is competent • Writing is sometimes well constructed with appropriate paragraphing • Use of different sentence types and structures • Use of punctuation marks, mostly accurately • Use of relevant vocabulary and a selection of words • Most spelling of familiar words is accurate
Step 2	• Difficulty summarising texts in a focussed manner; words, phrases and whole sentences frequently copied from the text • Make some attempt to understand the text • Respond in a straightforward way to most explicit information • Make some comments about the structure of the text • Make some comments about words and phrases in a text • Make general reference to the text • Occasional comments about context • Attempt to make straightforward links between texts	• Writing is basic, occasionally showing an awareness of the purpose of the writing • Writing is occasionally focused with simple and sometimes clear communication to the reader • Writing is organised with occasional links between paragraphs • Some control over simple sentence structures • Uses simple punctuation marks, sometimes accurately • Use of familiar vocabulary • Spell familiar words with some accuracy
Step 1	• Unable to summarise text; irrelevant words, phrases and whole sentences copied from the text. Own words not used • Little or no understanding of the text demonstrated • Make no attempt to identify important information in a text • Make some basic comments about the structure of the text • Identify words and phrases of interest • Make no, or irrelevant reference to the text • No contextual understanding • Make no comparison between texts	• Writing is basic • Writing lacks focus - ideas communicated simply to the reader • Writing is organised very simply with no, or inappropriate paragraphing • Use of simple sentences • Inaccurate or no use of punctuation • Use of simple vocabulary • Spell most words inaccurately

KS3 Assessment Steps - Geography			
	Enquiry Skills	**Location & Place**	**Human & Physical Processes**
Step 9	• Carry out personalised geographical investigations independently at different scales (local, national, global) • Evaluate sources of evidence critically and present coherent arguments and effective, accurate and well-substantiated conclusions	• Uses an extensive variety of locational knowledge to anticipate the potential causes, consequences and significance of events, making links between the local, national and global level	• Consider and evaluate future options for the sustained management of our planet
Step 8	• Design own fieldwork question • Reflecting critically on knowledge gained and able to use this with different locations	• Uses detailed locational knowledge to analyse the impact that global events have at a local, national and global level	• Explain complex interactions within and between physical and human processes and show how these interactions help change places and environments
Step 7	• Reflecting critically on fieldwork data, methods used and conclusions drawn • Chose own methods to investigate fieldwork	• Analysing the impact that global events have at a local, national and global level	• Explain causes and consequences and explain how the interaction between people and environments can result in complex and unintended changes
Step 6	**Number:** • Draw informed conclusions from numerical data • Draw evidenced conclusions and summaries from fieldwork transcripts and data • Plan an appropriate investigation for a given fieldwork question	• Explain the significance of connections between physical and human locations	• Make predictions, linking knowledge of processes to detailed place-based exemplars at a variety of scales
Step 5	**Graphs:** • Interpret and extract information from different types of graphs and charts • Respond to geographical questions in detail using data	• Explain connections between areas at the local, national and global level • Explain physical and human features in detail and with named examples	• Link knowledge of processes to local, national and global exemplars to make comparisons and draw conclusions • Comparing outcomes of processes between HIC, LIC and MICs
Step 4	**Number:** • Design fieldwork data collection sheets and collect data • Use a wide range of sources, including aerial photos and images • Use appropriate geographical language to respond to questions • Understanding of the range of techniques and methods used in fieldwork, including observation and different kinds of measurement	• Describe connections between areas at the local, national and global level, eg: infrastructure, trade	• Describe how physical and human processes can lead to environments differing around the world • Can explain processes using key terms
Step 3	**Cartography:** • Interpret cross sections and transects **Cartography:** • Use and understand gradient, contour and spot height on OS maps and other isoline maps • Follow simple instructions to complete a fieldwork investigation	• Knowledge of the location of different counties and continents • Describe physical and human features in basic terms	• Describe processes using examples and key terms, eg: 'erosion' and 'plates subducted'
Step 2	**Graphs:** • Select and construct appropriate graphs and charts **Cartography:** • Use and understand coordinates, scale and distance • Use common sources (maps, atlases and globes) • Provide basic responses to geographical questions	• Simple locational knowledge about town and countries in the UK • Simple locational knowledge about the UK's location in the world	• Can describe processes but with a lack of key terminology, eg: wears away instead of hydraulic

	KS3 Assessment Steps - Geography		
	Enquiry Skills	**Location & Place**	**Human & Physical Processes**
Step 1	**Graphs:** • Read data from graphs/charts and extract data **Investigate**: • Make basic observations and ask basic questions (WWWWH)	• Simple locational knowledge about the local area, eg: location of school, house, etc	• Observe changes and make statements about these
	Locational Knowledge • Human and physical features of geography in spatial, cultural and political contexts **Physical Geography** • Geological timescales and plate tectonics • rocks, weathering and soils • weather and climate, including the change in climate from the Ice Age to the present • Glaciation, hydrology and coasts **Human Geography** • Population and urbanisation • International development • Economic activity in the primary, secondary, tertiary and quaternary sectors • The use of natural resources		

KS3 Assessment Steps - History			
	Contextual Knowledge Local, National & International History (AO1, AO2)	**Source Skills (AO3)**	**Interpretations (AO4)**
Step 9	• Show a confident and extensive knowledge to construct substantiated analysis about historical change, continuity and causation	• Evaluate critically a range of sources, considering the issues surrounding origin, message and purpose, and compare clearly the strengths and weaknesses	• Reach original and creative interpretations within a wide frame of historical reference
Step 8	• Show knowledge and understanding to construct substantiated analysis about historical change, continuity and causation	• Evaluate critically a range of sources, considering the issues surrounding origin, message and purpose, and make attempts to compare strengths and weaknesses	• Explain why there are different interpretations of the past, why some events are more significant than others and how the student's/historian's perspective can shape these views. Do this drawing links across a range of historical periods and different time frames
Step 7	• Provide clear explanations of a range of events, people and features of past societies and periods. Begin to recognise historical change, continuity and causation	• Evaluate a range of sources and consider the issues surrounding origin, message and purpose	
Step 6	• Provide clear explanations of a range of events, people and features of past societies and periods	• Evaluate source material (including one single source) and consider the issues surrounding origin, message and purpose	• Explain why there are different interpretations of the past, why some events are more significant than others and how the student's/historian's perspective can shape these views
Step 5	• Describe a range of events, people and some features of past societies and periods, with at least one clear explanation linked to the question	• Evaluate sources to establish their usefulness in relation to the question that clearly supports the argument	• Explain why there are different interpretations of the past and why some events are more significant than others
Step 4	• Describe a range of events, people and some features of past societies and periods, with some explanation	• Evaluate sources to establish their usefulness in relation to the question	• Attempt to explain why there are different interpretations of the past and why some events are more significant than others
Step 3	• Describe a range of events, people and some features of past societies and periods	• Describe the content of sources, establishing clear relevance to the question	• Describe some interpretations of the past, recognising that some events are more significant than others
Step 2	• Identify a range of events, people and some features of past societies and periods	• Describe the content of several sources, without establishing clear relevance to the question	• Identify some interpretations of the past, recognising that some events are more significant than others
Step 1	• Identify some of the events, people and features of past societies and periods	• Describe the content of a source, without establishing clear relevance to the question	• Identify some interpretations of the past

KS3 Assessment Steps - Maths				
	Number, Ratio, Proportion & Rates of Change	**Algebra**	**Geometry**	**Probability & Statistics**
Step 9	• Understand why surds are used, and use operations on surds including multiplication and division, addition and subtraction	• Solve simultaneous equations in two variables where one equation is linear and the other is quadratic • Use algebra to prove mathematical thinking	• Sketch the graphs of sine, cosine and tangent functions for any angle, and generate and interpret graphs based on these functions • Use sine, cosine and tangent of any angles	• Interpret and construct histograms • Understand the concept of conditional probability and apply it to two way tables and Venn diagrams
Step 8	• Determine the bounds of intervals • Use direct and indirect proportion including graphical and algebraic representations	• In simplifying algebraic expressions, use rules of indices for negative and fractional values • Solve problems using intersections and gradients of graphs (perpendicular lines)	• Calculate the surface area of cylinders and volumes of cones and spheres • Use Pythagoras' theorem when solving problems in 3D	• Understand how different methods of sampling and different sample sizes may affect the reliability of conclusions drawn • Use stratified sampling technique
Step 7	• Solve problems involving calculating with powers, roots and numbers expressed in standard form	• Factorise quadratic expressions including coefficients of x^2 • Find the next term or nth term of a sequence where the rule is quadratic • Use algebraic and graphical methods to solve simultaneous linear equations in two variables • Rearrange complex real world formula including SUVAT equations and cosine rules	• Use sine, cosine and tangent in right-angled triangles when solving problems in two dimensions • Convert between units of measure • Calculate lengths of circular arcs and areas of sectors	• Interpret and construct cumulative frequency tables and diagrams • Draw and compare box plots • Estimate the median and interquartile range from cumulative frequency and use these to compare distributions • Calculate the probability of a compound event and use this in solving problems with tree diagrams
Step 6	• In making estimates, round to one significant figure and multiply and divide mentally • Understand the effects of multiplying and dividing by numbers between 0 and 1 • Understand and use compound measures, such as speed • Calculate compound interest (repeat proportional change) and reverse percentages	• Formulate and solve linear equations with unknowns on both sides with whole-number coefficients • Factorise linear algebraic expressions • Solve simple inequalities and express them on a number line • Recognise geometric sequences and appreciate other sequences that arise • Expand quadratic expressions • Evaluate algebraic formulae, substituting fractions, decimals and negative numbers such as SUVAT equations • Calculate and interpret gradients and intercepts of graphs of such linear equations numerically, graphically and algebraically • Plot simple quadratic and cubic graphs	• Understand and apply Pythagoras' theorem • Calculate lengths, areas and volumes in plane shapes and right prisms including triangular prisms • Enlarge shapes by a fractional scale factor, and appreciate the similarity of the resulting shapes • Derive and use the sum of angles in a triangle and use it to deduce the angle sum in any polygon and calculate exterior and interior angles of polygons	• Specify hypotheses and test them by designing and using appropriate methods that take account of bias • Determine the modal class, estimate the mean, median and range of sets of grouped data • Understand relative frequency as an estimate of probability and use this to compare outcomes of experiments

	KS3 Assessment Steps - Maths			
	Number, Ratio, Proportion & Rates of Change	**Algebra**	**Geometry**	**Probability & Statistics**
Step 5	• Order and round to a given decimal place • Express one number as a fraction or percentage of another number • Calculate percentage increases and decreases • Use the equivalences between fractions, decimals and percentages • Use the relationship between fractions and ratio • Use all four operations with fractions including mixed numbers	• Find the nth term in linear sequences • Expand sets of brackets and simplify the following expressions • Solve two step equations with fractional coefficients, negative answers and decimals • Rearrange simple equations such as y=mx +c (make x the subject) • Draw linear graphs in the form y=mx+c	• Recall and use the properties of quadrilaterals in classifying different types of quadrilateral • Use standard ruler and compass construction techniques • Understand and use the relationship between parallel lines and alternate and corresponding angles • Recall and use appropriate formulae for finding circumferences and areas of circles • Calculate volumes and surface areas of cuboids • Be able to describe different transformations	• Choose appropriate equal class intervals over a sensible range to create frequency tables • Construct pie charts • Draw and interpret scatter diagrams and have a basic understanding of correlation • When dealing with a combination of two experiments, identify all the outcomes • Use the knowledge that the total probability of all the mutually exclusive outcomes of an experiment is 1
Step 4	• Order, add and subtract negative numbers in context • Use all four operations with decimals to two decimal places • Reduce a fraction to its simplest form by cancelling common factors • Solve simple problems involving ratio and direct proportion • Divide a quantity into a given ratio • Calculate fractional or percentage parts of quantities • Multiply any three-digit number by any two-digit number without a calculator • Divide, giving a remainder in decimals • Use prime factor decomposition for HCF and LCM	• Construct, express in symbolic form and use simple formulae involving one or two operations • Solve two step equations • Substitute values into simple expressions • Continue sequences and notice patterns from term to term	• Measure and draw angles to the nearest degree • Recall and use the angle sum of a triangle • Apply the properties of angles at a point on a straight line, vertically opposite angles • Understand and use the formula for the area of triangles, parallelograms and trapeziums • Enlarge shapes by a positive integer scale factors	• Find and use the mean of discrete data • Compare two simple distributions using the range and mode, median or mean • Interpret graphs and diagrams, including pie charts, and draw conclusions • Find and justify probabilities and approximations to these by selecting and using methods based on equally likely outcomes and experimental evidence, as appropriate • Understand that different outcomes may result from repeating an experiment • Arrange data into Venn diagrams and use basic notation
Step 3	• Use place value to multiply and divide whole numbers and decimals by 10, 100 and 1000 • Recall multiplication facts up to 12 x 12 and corresponding division facts • Use order of operations (BIDMAS) • Multiply 2 by 2 digit numbers and divide by an integer using a method without remainder • Find the HCF and LCM of two or more numbers. Be able to identify prime numbers	• Simplify like terms • Solve one-step equations • Use and interpret algebraic notation, including: ab in place of a×b, 3y in place of y+y+y and 3×y, a2 in place of a×a, etc	• Identify angles as obtuse, acute and reflex • Rotate, reflect and translate shapes • Understand and use the formula for the area of a rectangle	• Collect discrete data and record them using a frequency table • Understand and use the median, mode and range to describe small sets of data • Group data, where appropriate, in equal class intervals, represent collected data in frequency diagrams and interpret such diagrams • Construct and interpret simple line graphs • Understand and use the probability scale from 0 to 1

	KS3 Assessment Steps - Maths			
	Number, Ratio, Proportion & Rates of Change	**Algebra**	**Geometry**	**Probability & Statistics**
Step 2	• Multiply and divide whole numbers by 10 and 100 • Recall multiplication facts up to 12 x 12 • Use efficient written methods of addition, subtraction and short multiplication • Add and subtract decimals to two places and order decimals to three places • Find factors and multiples of numbers	• Use simple formulae expressed in words • Consider the idea of letters being used as variables • Work with coordinates in all four quadrants	• Make 3-D mathematical models by linking given faces or edges • Draw common 2-D shapes in different orientations on grids • Choose and use appropriate units and instruments, interpreting, with appropriate accuracy, numbers on a range of measuring instruments • Find perimeters of simple shapes and find areas by counting squares	• Extract and interpret information presented in simple tables and lists • Construct bar charts and pictograms and interpret information presented in these forms
Step 1	• Show understanding of place value in numbers up to 1000 and use this to make approximations • Use decimal notation and recognise negative numbers, in contexts such as money and temperature • Add and subtract numbers with two digits mentally and numbers with three digits using written methods • Recall the 2, 3, 4, 5, 10 multiplication tables and derive the associated division facts		• Use mathematical names for common 3-D and 2-D shapes and describe their properties, including numbers of sides and corners • Understand angle as a measurement of turn and recognise right angles in turns	• Sort objects and classify them using more than one criterion • Record results in simple lists, tables and block graphs, in order to communicate their findings

KS3 Assessment Steps – Modern Foreign Languages			
	Listening & Reading	**Speaking**	**Writing**
Step 9	• Understand longer, varied texts on unfamiliar topics, in the case of listening spoken at near native speed	• Confidently ask and answer a range of questions for 2-3 minutes giving more developed responses on a range of topics and showing the ability to cope with unexpected questions	• Write extended pieces of several paragraphs from memory, drawn from a variety of current and previous topics, using a range of more complex structures which may contain minor errors but with a high degree of accuracy • Translate more than one paragraph from English on a range of topics
Step 8	• Understand longer passages containing a few unpredictable elements, including a range of structures and topics and can cope with some unfamiliar language in a variety of authentic texts	• Take part in a continuous spontaneous exchange on familiar topics, including those covered in previous years, using a variety of structures and with less predictable interactions	• Write texts of several paragraphs from memory, using a variety of structures, manipulating known structures and combining with new elements to produce new meanings, which are almost always clear • Translate a longer paragraph from English on a range of topics
Step 7	• Understand longer passages from four-five topics including a range of structures, and can infer meaning in simple authentic texts	• Interact confidently within familiar topics and in classroom talk without reference to notes, with some hesitation and/or inaccuracy but with increasing spontaneity	• Write from memory at greater length on one topic, using past, present and future tenses, recycling learnt language and combining with new elements to express own ideas • Translate short paragraphs from English on a range of topics
Step 6	• Understand a longer passage on a range of topics, inferring meaning of some unfamiliar language in present, past and future tenses	• Interact across three-four topics and in classroom talk, in past, present and future tenses, adapting and re-combining pre-learnt language to produce exchanges with some spontaneity, including forming some questions with some pauses for thinking	• Write short paragraphs from memory on two-three topics with good accuracy, using past, present and future tenses, adapting known structures (with some inaccuracy) and add new, researched language with some success • Translate short paragraphs on 2-3 topics from English in the present, past and future tenses
Step 5	• Understand (with repetition for listening), the details in a passage on more than 1 topic comprising simple sentences with mostly familiar language in present, past or future tenses	• Ask and answer an increasing range of questions in topic-based and classroom interaction adapting language appropriately, and can give information confidently from two-three recent topics, using present and past or future tenses	• Write a paragraph from memory made up of short sentences using taught language on a few topics, with some errors, using past, present or future tenses • Translate short paragraphs from English in the present, past or future tenses
Step 4	• Understand (with repetition where necessary in listening), a short passage made up of familiar words and basic sentences in present and past or future tenses	• Ask and answer simple questions on a few familiar topics and in classroom talk including opinions with good pronunciation, expressing opinions and responding to those of others	• Write a short paragraph from memory using simple sentences, including present and past or future tenses, from one familiar topic with reasonable spelling • Translate short paragraphs from English
Step 3	• Understand (with pauses and repetition where necessary in listening), the main points of a short passage made up of a few familiar words and sentence.	• Ask and answer simple questions on the current topic and for classroom talk, producing short phrases, including opinions, from memory with secure pronunciation	• Write short phrases from memory in the present tense, with understandable spelling, and change some elements in sentences to create new meaning • Translate longer sentences from English.
Step 2	• Understand, (with pauses and repetition where necessary in listening), a range of familiar words and short sentences	• Can perform short role plays with several exchanges and reasonable pronunciation	• Write short phrases from memory on the current topic and substitute one element to vary meaning • Translate short sentences from English
Step 1	• Understand, (with repetition for listening), some familiar words and short sentences.	• Say familiar words and phrases with understandable pronunciation • Can ask and answer simple pre-learnt questions from memory	• Write single words from memory with understandable spelling • Translate single words from English.

KS3 Assessment Steps - Music			
	Composing	**Performing**	**Appraising**
Step 9	• Produce compositions that demonstrate a coherent development of musical ideas, consistency of style and a degree of individuality	• Show exceptional performing skills in a range of ensembles • Exceptional use of articulation, dynamics and timbre resulting in a controlled fluent and highly expressive performance	• Evaluate with outstanding critical judgements about the use of musical conventions and other characteristics which are reflected in own and others' work
Step 8	• Compose extended compositions with a sense of direction and shape • Exceptional ability to produce compositions with some development of ideas	• Perform with a sense of direction and shape • Perform more complex instrumental parts within an ensemble	• Critically evaluate and make critical judgements about the use of musical conventions and other characteristics which are reflected in own and others' work
Step 7	• Create coherent compositions • Adapt develop, extend and discard musical ideas within given and chosen musical structures, genres, style and traditions • Excellent ability to produce compositions with some development of ideas	• Evaluate how venue, occasion and purpose affects the way music is created, performed and heard • Perform different instrumental lines/parts within an ensemble	• Evaluate and make critical judgements about the use of musical conventions and other characteristics which are reflected in own and others' work • Using subject vocabulary, make confident and consistent improvements to their own work and others in the light of a chosen style for authenticity
Step 6	• Use harmonic and non-harmonic devices where relevant • Sustain and develop musical ideas • Good ability to produce compositions with some development of ideas	• Select and make expressive use of tempo, dynamics phrasing and timbre	• Make improvements to their own and others work in the light of a chosen style
Step 5	• Compose music using appropriate musical devices such as melody rhythms chords and structures • Satisfactory ability to produce compositions with some development of ideas	• Ability to maintain Independent parts from notation and memory and to recall phrases including singing or playing a solo part	• Refine and improve their work • Can evaluate own and others work independently using adequate subject specific vocabulary
Step 4	• Compose by developing musical ideas within musical structures • Limited ability to produce compositions with some development of ideas	• Perform maintaining own instrumental part Beginning to show ability to listen to and recall phrases.	• Suggest improvements to their own and others work, commenting on how intentions have been achieved,
Step 3	• Combine several layers of sound	• Perform rhythmically simple parts that use a limited range of notes	• Make improvements to their own work commenting on the intended effect • Able to describe the work of others using basic key words
Step 2	• Choose carefully and order sounds within simple structures such as beginning, middle, end and in response to given starting points	• Perform simple patterns and accompaniments keeping to a steady pulse	• Able to identify improvements to their own work • With support can state a strength and weakness in their own and others work
Step 1	• Create and choose sounds in response to given starting points	• Repeat short rhythmic and melodic patterns	• With support can state a strength and weakness in their own work

	KS3 Assessment Steps – Physical Education		
	Skills, techniques and performance	**Knowledge and understanding**	**Health and well being**
Step 9	• Demonstrate a wide range of skills, from a variety of sports, within competitive games. Consistently showing high levels of accuracy, control and fluency • Highly effective in the use of a wide range of tactics and strategies. Able to respond imaginatively, and influence outcomes	• Understand and effectively apply the rules and regulations from a wide range of sports • Demonstrate detailed and accurate knowledge and understanding of skills, techniques and tactics, and justify their use within a wide range of sports • Be able to evaluate and provide accurate feedback on own and others performance, always leading to improvements	• Can lead the safe preparation for, and recovery from, physical activity • Has an in-depth understanding of the impact of physical activity on a person's health, wellbeing and fitness
Step 8	• Demonstrate a wide range of skills, from a variety of sports, within competitive games. Consistently showing high levels of accuracy, control and fluency • Highly effective in the use of a wide range of tactics and strategies. Able to respond imaginatively, and influence outcomes	• Understand and effectively apply the rules and regulations from a wide range of sports • Demonstrate detailed and accurate knowledge and understanding of skills, techniques and tactics, and justify their use within a wide range of sports • Be able to evaluate and provide accurate feedback on own and others performance, always leading to improvements	• Can lead the safe preparation for, and recovery from, physical activity • Has an in-depth understanding of the impact of physical activity on a person's health, wellbeing and fitness
Step 7	• Demonstrate a wide range of skills, from a variety of sports, within competitive games. Showing high levels of accuracy, control and fluency • Effective in the use of a range of tactics and strategies. Able to respond, and influence outcomes	• Understand and effectively apply the rules and regulations from a wide range of sports • Demonstrate accurate knowledge and understanding of skills, techniques and tactics and their use within a wide range of sports • Be able to evaluate and provide accurate feedback on own and others performance, often leading to improvements	• Can lead the safe preparation for, and recovery from, physical activity • Has an in-depth understanding of the impact of physical activity on a person's health, wellbeing and fitness
Step 6	• Demonstrate a wide range of skills, from a variety of sports, within competitive games. Showing increasing levels of accuracy and control • Effective in the use of a range of tactics and strategies. Able to respond, and occasionally influence outcomes	• Understand and effectively apply the rules and regulations from a range of sports • Demonstrate accurate knowledge and understanding of skills, techniques and tactics and their use within a range of sports • Be able to evaluate and provide accurate feedback on own and others performance, sometimes leading to improvements	• Can independently and safely prepare for, and recover from, physical activity • Has an understanding of the impact of physical activity on a person's health, wellbeing and fitness
Step 5	• Demonstrate a range of skills, from a variety of sports, within conditioned games. Showing increasing levels of accuracy and control • Sometimes effective in the use of a range of tactics and strategies. Able to respond, and occasionally influence outcomes	• Understand and effectively apply the rules and regulations from some of sports • Demonstrate accurate knowledge and understanding of skills, techniques and tactics and their use within some sports • Be able to evaluate and provide feedback on own and others performance	• Can independently and safely prepare for, and recover from, physical activity • Has an understanding of the impact of physical activity on a person's health, wellbeing and fitness
Step 4	• Demonstrate skills, from a variety of sports, within increasingly challenging practices. Showing some levels of accuracy and control • Sometimes effective in the use of tactics and strategies	• Understand and effectively apply the rules and regulations from some sports • Demonstrate accurate knowledge and understanding of skills, techniques and tactics and their use within some sports • Be able to provide some feedback on own and others performance	• Can independently and safely prepare for, and recover from, physical activity • Has an understanding of the impact of physical activity on a person's health, wellbeing and fitness
Step 3	• Demonstrate basic skills, from some sports, within increasingly challenging practices. Showing some levels of accuracy and control • Sometimes effective in the use of tactics and strategies	• Understand the basic rules and regulations from some sports • Demonstrate knowledge and understanding of basic skills, techniques and tactics within some sports	• With support can safely prepare for, and recover from, physical activity • Has a limited understanding of the impact of physical activity on a person's health, wellbeing and fitness

	KS3 Assessment Steps – Physical Education		
	Skills, techniques and performance	**Knowledge and understanding**	**Health and well being**
Step 2	• Demonstrate basic skills, from some sports, in isolated practice, showing some levels of control	• Understand the basic rules and regulations from a sport • Demonstrate some knowledge and understanding of basic skills and techniques	• With support can safely prepare for, and recover from, physical activity • Has a limited understanding of the impact of physical activity on a person's health, wellbeing and fitness
Step 1	• Demonstrate very basic skills, from some sports, in isolated practice, showing little control	• Show little understanding of the rules and regulations of any sports, and little understanding of how to perform skills effectively	• With support can safely prepare for, and recover from, physical activity • Has a limited understanding of the impact of physical activity on a person's health, wellbeing and fitness

KS3 Assessment Steps – Religious Studies			
	Viewpoints & Argumentation	**Textual Understanding**	**Understanding of Religious Practices** **Beliefs, Stories, Places of Worship, Festivals, Artefacts**
Step 9	• **Analyse**, in depth, a wide range on perspectives on questions of identity and belonging, meaning, truth and purpose. Express informed religious views using **literature**, and analyse religious beliefs making links between different religions and having **balanced conclusions**	• Embed the most apt textual references so as to elucidate the subtlety of a belief, with accurate referencing	• Evaluate the importance of religious practices within religions
Step 8	• Analyse a range of viewpoints on identity, belonging, meaning, truth and purpose and fully **justify their own viewpoints** in a detailed evaluation of arguments	• Embed the most apt textual references so as to elucidate the subtlety of a belief	• Evaluate the importance of religious practices within religions
Step 7	• Articulate **personal and critical responses** to questions of meaning, purpose and truth and ethical issues. **Evaluate** the significance of religious and other viewpoints	• Include a range of suitable and accurately-quoted textual reference to justify different beliefs	• Critically analyse the significance of religious practices
Step 6	• **Express different insights** into the relationship between questions of identity, belonging, meaning, truth and purpose within a religion. Consider challenges to belonging to a religion	• Include more than one suitable textual reference to justify a belief or different beliefs	• Explain different interpretations of religious practices
Step 5	• **Explain** what inspires and influences them, expressing their own and others' views about religion	• Include suitable textual references to justify a belief	• Explain the significance of religious practices
Step 4	• **Describe** what inspires and influences religious belief and non-religious belief	• Paraphrase text to support a belief	• Explain religious practices
Step 3	• Make a l**ink** between belief and action. Students can respond to, and question, religious belief and practices	• Paraphrase text that is relevant to the topic	• Describe religious practices
Step 2	• **Respond and begin to explain** questions about own and others' experiences and feelings	• Refer to text in broad terms	• State religious practices
Step 1	• Give a **personal opinion** and talk about own experiences and feelings	• Make no reference to text	• Make no reference to religious practices

KS3 Assessment Steps - Science

	Biology	Chemistry	Physics	Scientific Methods
Step 9	**Gas exchange:** • Interpret data and evaluate impact of effects of exercise, asthma and smoking on the system **Inheritance:** • Discuss the roles of Watson, Crick, Franklin and Wilkins in discovering DNA's structure **Ecosystems:** • Evaluate impact of humans on other organisms, with reference to accumulation of toxic materials **Reproduction:** • Make links between menstrual cycle, fertilisation and fertility	**Atoms, elements compounds:** **Chemical reactions:** • Represent chemical reactions using balanced symbol equations **Materials:** **Energetics:** **Pure and impure substances:** • Suggest how the rate of diffusion may be affected **The Earth and the atmosphere:** • Link the formation of rocks together to describe and explain the rock cycle in detail **The particulate nature of matter:** **The Periodic Table**: • Link group number and electron structure to explain the patterns of reactivity for Group 1 and Group 7 in the Periodic Table	**Energy:** • Justify suggestions about suitability of energy resources. • Suggest how convection, conduction and radiation may be changed • Suggest why thermal insulators work. **Motion and forces:** • Apply Hooke's Law to force meters. • Apply knowledge to explain the work done and changes of energy on deformation. **Waves:** • Explain refraction with reference to particles and the speed of light. Link the equation for speed, to the application of sound waves. **Electricity and magnetism:** • Link electric current to the structure of atoms. • Explain why the geographical north pole of the Earth is actually a magnetic south pole. • Explain how electrostatic force attraction by the induction of charge **The particulate nature of matter:** • Apply knowledge of physical changes and particles in explaining Brownian motion	**Analysis and Evaluation:** • Evaluate the reliability of methods in detail. • Suggest further questions that may arise from results of investigations and data analysis and evaluation. **Experimental Skills and Investigation:** • I can suggest detailed improvements to methods where reliability may be a concern.
Step 8	**Cells:** • Suggest what affects rate of diffusion **Respiration:** • Evaluate implication for organisms of both based on reactants and products **Gas exchange:** • Explain how ventilation occurs with reference to pressure changes and lung volume **Inheritance:** • Apply knowledge of genetics to explain the role of gene banks **Nutrition:** • Calculate energy requirements of a healthy diet **Photosynthesis:** • Link importance of photosynthesis to atmospheric gases **Ecosystems:** • Discuss importance of insect pollination to human food security **Reproduction:** • Evaluate infertility treatments **Musculoskeletal:** • Suggest how artificial parts may affect an individual	**Atoms, elements compounds:** • Explain why mass is conserved during changes of state and chemical reactions **Chemical reactions:** • Explain how collisions are random and must be successful in order for a reaction to occur **Materials:** • Discuss and suggest methods that may be used to extract metals more reactive than carbon **Energetics:** **Pure and impure substances:** • Suggest some applications for making substances impure **The Earth and the atmosphere:** • Discuss the efficacy of recycling **The particulate nature of matter:** **The Periodic Table:** • Explain how metals and non-metals react with water using symbol equations, recognising the patterns and chemical forms which result in the solution being either acidic or alkaline	**Energy:** • Use scientific principles to suggest suitability of energy resources. Evaluate energy efficiency. • Discuss how all materials have a store of energy inside them. • Interpret block and Sankey diagrams. **Motion and forces:** • Calculate resultant moments. Calculate extension. • Interpret resultant forces to predict motion. **Waves**: • Explain how we see different colours in different coloured light. • Explain dispersion with reference to wave speed. • Explain why sound is a longitudinal wave, with reference to the direction of vibrations and energy. **Electricity and magnetism:** • Explain the difference and reason for electrical current and electron flow. • Suggest applications for materials of higher or lower resistance. • Explain attraction and repulsion in terms of the direction of field lines. • Describe rogue waves. **Pressure In Fluids:** • Use calculations of density to predict whether an object will float or sink. **Space Physics:** • Link knowledge to light waves to explain how light and heat energy travels to Earth from the Sun. • Apply knowledge of the seasons in the northern hemisphere to explain why the southern hemisphere experiences seasons differently	**Analysis and Evaluation:** • I can evaluate data, with reference to potential sources of random and systematic error. Evaluate the reliability of methods in detail. **Experimental Skills and Investigation:** • Make more complex and quantitative predictions using scientific knowledge and understanding **Scientific Attitudes:** • Evaluate risks and hazards to plan a safe scientific investigation.

KS3 Assessment Steps - Science

	Biology	Chemistry	Physics	Scientific Methods
Step 7	**Gas exchange:** • Link adaptations of the human gas exchange system to their functions **Respiration:** • Compare/contrast aerobic and anaerobic respiration **Health:** • Evaluate effects of recreational drugs **Inheritance:** • Explain how variation and environmental pressures lead to evolution **Nutrition:** • Discuss benefits of gut bacteria, and link adaptions and function of digestive organs **Photosynthesis:** • Explain leaf adaptations **Ecosystems:** • Explain how changes in numbers of one organism affect another, referencing competition and predation **Reproduction:** • Discuss impact of maternal lifestyle on the foetus	**Atoms, elements compounds:** **Chemical reactions:** • Explain the conditions and uses of neutralisation, combustion, thermal decomposition, oxidation, displacement and the reaction of metals and acids, as examples of chemical reactions **Materials:** • Explain how metals can be obtained from metal oxides using carbon, when given the reactivity series **Energetics:** • Explain changes of state with reference to the amounts of energy of particles and whether a chemical reaction is exothermic or endothermic **Pure and impure substances:** • Identify pure and impure substances from data. Describe dissolving, with reference to particles **The Earth and the atmosphere:** • Explain the factors that may affect the appearance and properties of these rocks **The particulate nature of matter:** • Explain how pressure in gases may change **The Periodic Table:** • Explain why Mendeleev made the changes he did when developing the modern Periodic Table	**Energy:** • Calculate electrical power and energy transferred • Explain expansion in terms of particles **Motion and forces:** • Interpret distance-time graphs to calculate speed • Calculate moments **Waves:** • Compare light waves and waves in matter • Compare eyes and cameras. • Describe how sound waves to transfer information if converted to electrical signals. • Explain how colour blindness occurs, with reference to rod and cones **Electricity and magnetism**: • Calculate quantities by rearranging equations. • Discuss resistance in terms of conductors and insulators. Link conduction and insulation with atomic structure. • Describe how magnetic induction and motors. • Discuss applications of static electricity **Pressure In Fluids:** • Discuss applications of changing pressure **Space Physics:** • Explain how the different seasons occur with reference to the tilt of the Earth and proximity to the Sun. • Explain the difference between a calendar and a lunar month. • Explain light years **Particulate nature of matter:** • Compare solids, liquids and gases with reference to density difference	**Analysis and Evaluation:** • Write reasoned explanations of the conclusion based on the experimental data **Experimental Skills and Investigation:** • Can explain the importance of sampling techniques and control variables • Can accurately make and record observations and measurements using rounding and decimal points
Step 6	**Cells:** • Explain the adaptations of plant and animal cells, describe diffusion and the function of organelles **Respiration:** • Describe applications of respiration, such as fermentation and write word equations for both types **Gas exchange:** • Explain adaptations of structures in human gas exchange system **Health:** • Explain effects of recreational drug and substance misuse **Inheritance:** • Describe the roles of DNA, genes and chromosomes in heredity **Nutrition:** • Explain the role of digestive enzymes and how plants gain their nutrition	**Atoms, elements compounds:** • Represent compounds using chemical formulae **Chemical reactions:** • Describe factors that affect reaction rate with reference to particles and collisions and represent chemical reactions using formulae and symbol equations **Materials:** • Explain the differences in properties of different materials with reference to their structure and link uses to their properties **Energetics:** • Explain changes of states with reference to energy changes **Pure and impure substances:** • Explain how simple techniques for separating mixtures work **The Earth and the atmosphere:** • Suggest methods to conserve resources reduce the level of carbon dioxide in the atmosphere **The particulate nature of matter:** • Describe gas pressure with reference to particles	**Energy:** • Compare energy resources and efficiency. Calculate cost of electricity • Explain radiation in terms of waves and convection, in terms of particles **Motion and forces**: • Interpret distance-time graphs • Calculate resultant force • Explain how simple machines multiply force • Explain effects of opposite moments • Discuss applications of friction **Waves:** • Describe how pinhole cameras, eyes and convex lenses work • Describe colours of light in terms of frequency • Explain that light as a transverse EM wave • Describe the superposition • Explain how sound travels with reference to particles **Electricity and magnetism**: • Describe how a bar magnet inside an electromagnetic field moves • Find the shape of a magnetic field • Explain static electricity in terms of movement of electrons	**Experimental Skills and Investigation:** • Select and apply appropriate sampling techniques **Measurement:** • Explain the importance of SI units **Scientific Attitudes:** • Describe how to improve accuracy, precision, repeatability, reproducibility and objectivity

KS3 Assessment Steps - Science

	Biology	Chemistry	Physics	Scientific Methods
Step 6	**Photosynthesis:** • Explain why most life depends on photosynthesis **Reproduction:** • Quantitatively investigate seed dispersal mechanisms **Musculoskeletal:** • Explain how antagonistic muscle pairs work	**The Periodic Table:** • Explain how metals and non-metals react with water using word equations and explain some of the properties of metals and non-metals with reference to their structure	**Pressure In Fluids:** • Explain how pressure in liquids results in upthrust, allowing some objects to float • Explain the effects of pressure in terms of particles **Space Physics:** • Explain that our Sun is a star, and that there are other stars and solar systems in our galaxy and other galaxies in the Universe • Calculate weight **Particulate nature of matter:** • Explain the effect of temperature on the motion and spacing of particles	
Step 5	**Cells:** • Identify adaptations of unicellular organisms, compare animal and plant cells **Respiration:** • State the difference between aerobic and anaerobic, in terms of oxygen requirements and reactants and products **Gas exchange:** • Describe the impact of exercise, asthma and smoking on the system, and the role of stomata in leaves **Inheritance:** • Explain how variation can be continuous or discontinuous and how competition can lead to extinction **Nutrition:** • Explain the consequences of unbalanced diet **Photosynthesis:** • Describe leaf adaptations including the role of stomata, and state the word equation for photosynthesis **Ecosystems:** • Explain how organisms are adapted to their environment, and construct and interpret food webs **Reproduction:** • Describe stages of menstrual cycle and explain role of gametes in fertilisation **Musculoskeletal:** • Explain how parts of the system work together	**Atoms, elements compounds:** • Explain the differences between atoms, elements and compounds **Chemical reactions:** • Describe neutralisation, combustion, thermal decomposition, oxidation, displacement and the reaction of metals and acids as examples of chemical reactions. Represent chemical reactions using word equations **Materials:** • Describe simple displacement reactions when given the order of metals and carbon in the reactivity series **Energetics:** • Describe changes of states with reference to energy changes **Pure and impure substances:** • Describe how to separate mixtures and describe how impurities may affect boiling and melting points of impure substances **The Earth and the atmosphere:** • Describe the carbon cycle and the impact of human activities on the carbon cycle • Describe the rock cycle and how different types of rock are formed **The particulate nature of matter:** • Explain the properties of the three states of matter with reference to the particle model **The Periodic Table** • Describe how metal oxides and non-metal oxides react with water • Describe the changes that Mendeleev made when he developed the modern Periodic Table	**Energy**: • Calculate and compare energy values of food • Explain how almost all energy comes from the Sun. Calculate energy efficiency • Explain conduction in terms of particles, and convection, radiation **Motion and forces**: • Calculate average speed • Explain when a force is balanced or unbalanced • Describe levers • Explain ways to reduce or increase friction and air or water resistance **Waves**: • Describe how light behaves in relation to different materials, and how to make secondary colours of light • Describe traverse waves, with reference to oscillations and energy • Describe sonar, ultrasound and echolocation **Electricity and magnetism:** • Describe p.d. in a parallel circuit • Calculate current or resistance • Describe temporary and permanent magnets, and strength and distance of field lines • Describe how to make an electromagnet and increase its strength **Pressure In Fluids:** • Describe how floating or sinking is dependent on density • Explain some applications of changing pressure **Space:** • Describe how the seasons are caused • Describe factors affecting the size of gravity • Explain the existence of a leap year **Static electricity:** • Describe electrostatic forces as affecting objects inside the electric field of a charged object • Explain why objects attract or repel **The Particulate Nature Of Matter:** • Use the particle model to explain states and state changes, including: the arrangement of particles, shape and density and diffusion • Explain physical changes in terms of conservation of material, mass and reversibility	**Analysis and Evaluation:** • Explain random and systematic error. Interpret observations and data to identify more complex patterns **Experimental Skills and Investigation:** • Explain the importance of sampling techniques and control variables • Accurately make and record observations and measurements using rounding and decimal points **Measurement:** • Use simple equations to calculate new results from experimental data (for example energy efficiency, or work done)

KS3 Assessment Steps - Science

	Biology	Chemistry	Physics	Scientific Methods
Step 4	**Cells:** • State that diffusion moves substances in/out of cells and describe organisation of multicellular organisms **Respiration:** • State that respiration releases energy from food **Gas exchange:** • Describe what happens during breathing **Health:** • Describe effects of recreational drugs on behaviour, health and life **Inheritance:** • Describe how variation is caused and what a gene bank is **Nutrition:** • Describe how digestion happens **Photosynthesis:** • List reactants & products **Ecosystems:** • Describe how organisms can be affected by their environment **Reproduction:** • Describe plant reproduction and methods of seed dispersal **Musculoskeletal:** • Explain why some muscles need to be stronger than others, and how to measure forces from muscles	**Atoms, elements compounds:** • State that mass is conserved during changes of state and chemical reactions **Chemical reactions:** • State that during chemical reactions atoms are rearranged in order for reactants to become products and name some ways to speed up chemical reactions **Materials:** • Describe the reactivity series **Energetics:** • Describe that during chemical reactions, surroundings may increase or decrease in temperature **Pure and impure substances:** • Select appropriate simple techniques for separating given mixtures • Describe diffusion in terms of the particle model **The Earth and the atmosphere:** • Describe the composition and structure of the atmosphere and describe ways that human activities impact on the climate **The particulate nature of matter:** • Describe the properties of the three states of matter with reference to the particle model **The Periodic Table:** • Describe that elements with similar physical and chemical properties are grouped together • Describe the patterns of reactivity for Group 1 and Group 7 • Describe how the properties of metals and non-metals make them suitable for different uses	**Energy:** • Describe different energy resources • Explain the effect of a higher power rating on cost, and how to reduce energy waste • Describe conduction, convection, radiation and expansion **Motion and forces:** • Explain what affects an object's speed • Describe balanced and resultant forces, moments, the effects of air and water resistance, and Hooke's Law **Waves:** • Describe absorption, dispersion, reflection, refraction and how we see colours • Draw ray diagrams • Recognise superposition • Describe the reflection of an observed wave in water • Describe echoes and applications of absorbing sound. Label compressions and rarefactions **Electricity and magnetism:** • Describe current in parallel circuits • Describe how to connect a voltmeter • Describe the effects of increased resistance • Identify the direction of current flow • Show the direction of the field lines • Describe Earth and compasses as examples of magnets **Pressure In Fluids:** • Calculate pressure and density **Space Physics:** • Describe celestial bodies in order of size. Describe and calculate weight	**Analysis and Evaluation:** • Describe random and systematic error • Present experimental data using a scatter graph **Experimental Skills and Investigation:** • Identify variables (independent, dependent and control variables) in an investigation **Measurement:** • Conduct basic calculations on data such as mode, median, mean **Scientific Attitudes:** • Define accuracy, precision, repeatability, reproducibility and objectivity
Step 3	**Cells:** • Identify parts of cells from a diagram; draw cells viewed by light microscope **Respiration:** • Name the two types of respiration (aerobic and anaerobic) **Gas exchange:** • Label a diagram of the humans gas exchange system **Health:** • List effects of recreational drugs **Inheritance:** • Simply describe heredity; recognise that variation allows some individuals to compete better	**Atoms, elements compounds:** • List examples of atoms, elements and compounds and label the subatomic particles of a simple atomic model **Chemical reactions:** • Describe the difference between chemical and physical changes and can simply describe different types of chemical reaction • Describe how to use Universal indicator to find the strength of an acid or an alkali **Materials:** • Describe some properties of different materials eg: ceramics, polymers and composites **Energetics:** • State that during chemical reactions, energy may be released or absorbed	**Energy:** • Describe what a higher power rating means • Describe situations where energy is transferred, wasted and dissipated • Recall forms of potential energy • Describe applications of thermal insulators **Motion and forces:** • Describe changes in relative motion • Describe the effects of forces and friction. • Use force arrow • Identify if a force is contact or non-contact **Waves:** • Name some types of waves. State the law of reflection • Give some examples of when light is absorbed or reflected • State the functions of parts of the human eye • Recognise a longitudinal wave, frequency and auditory range	**Analysis and Evaluation:** • Present data using a bar graph **Experimental Skills and Investigation:** • Describe safety precautions and sampling techniques • Follow instructions to use appropriate techniques, apparatus and materials to conduct scientific investigations **Measurement:** • Accurately name some chemical products when given the reactants **Scientific Attitudes:** • Describe some safety precautions during scientific experiments

KS3 Assessment Steps - Science

	Biology	Chemistry	Physics	Scientific Methods
Step 3	**Nutrition:** • Describe role of food groups and the function of digestive organs **Photosynthesis:** • State that plants make glucose in leaves by photosynthesis **Ecosystems:** • Make and interpret simple food chains **Reproduction:** • Describe stages of pregnancy and birth in animals **Musculoskeletal:** • Describe functions of system parts	**Pure and impure substances:** • Simply describe how particles may move through a fluid by diffusion **The Earth and the atmosphere:** • Name the main elements in the atmosphere and Earth, including carbon based compounds • describe that the Earth's resources are limited and identify the parts which make up the structure of the Earth **The particulate nature of matter:** • Describe how changes of states may occur **The Periodic Table:** • State that the modern Periodic Table was developed by Mendeleev and state that elements in the same group of the Periodic Table will have similar patterns in reactions	**Electricity and magnetism:** • State the effect of a higher p.d. on a bulb and that p.d. in series. Describe electrical current and how to connect an ammeter. Describe resistance and 'direct current' **Space Physics:** • Describe the solar system as the planets, asteroids and comets orbiting the Sun	
Step 2	**Cells:** • List the main parts of a cell, and name some tissues and organs **Gas exchange:** • Name some tissues involved **Inheritance:** • State that genetic information is inherited **Nutrition:** • Simply describe the function of digestive organs **Photosynthesis:** • State that most life depends on photosynthesis **Ecosystems:** • Describe how numbers of one organism can affect another **Reproduction:** • Simply describe functions of organs in the human and plant reproductive system **Musculoskeletal:** • Identify system parts	**Atoms, elements compounds:** • Can recognise an atomic model can represent elements using chemical symbols **Chemical reactions:** • State that during chemical reactions reactants become products **Materials:** • State that some materials (particularly metals) are more reactive than others **Energetics:** • State that during changes of state, there are energy changes **Pure and impure substances:** • Describe what a pure substance and a mixture is and identify simple techniques for separating mixtures **The Earth and the atmosphere:** • List human activities that impact on the climate • List the parts which make up the structure of the Earth and name the three different types of rocks • Name some resources that humans use from the Earth **The particulate nature of matter:** • Describe the properties of the three states and represent with particle diagrams **The Periodic Table:** • List the properties of metals and non-metals and identify where metals, non-metals, periods and groups can be found on the Periodic Table	**Energy:** • List energy resources and stores. Recognise that energy is conserved or transferred, and that heat is transferred by convection, conduction and radiation and insulators **Motion and forces:** • Describe simple changes in motion. List some forces and state what a moment is **Waves:** • State what waves can travel through • Recognise reflection, refraction, absorption, the light spectrum and what convex lenses do • Identify parts of the eye • State that sound waves are longitudinal **Electricity and magnetism:** • State what p.d. does, and that current in a series circuit does not change. Identify series and parallel circuits • Name component symbols • List uses of electromagnets and recognise how they work **Pressure In Fluids:** • Recognise the effect of changing pressure on an object, and when pressure increases or decreases **Space Physics:** • Identify what gravity does. State that the Earth is tilted on its axis and state what a days, and years are caused by	**Analysis and Evaluation:** • Perform simple calculations • Identify simple patterns and trends in data • Present observation in a simple table • State simple conclusions **Experimental Skills and Investigation:** • Conduct experiments to test predictions • Identify some hazards. Make and record simple observations in a table • Make predictions using scientific language and understanding **Measurement:** • Correctly use some SI units

	KS3 Assessment Steps - Science			
	Biology	**Chemistry**	**Physics**	**Scientific Methods**
Step 1	**Cells:** • State what cells are; name equipment used to view cells **Gas exchange:** • Name organs involved **Inheritance:** • State that there is variation within and between species **Nutrition:** • List the contents of a balanced diet and name digestive organs **Photosynthesis:** • State that plants gain nutrients and water from soil via roots **Ecosystems:** • Recognise that all organisms in an ecosystem may affect each other; are affected by their environment **Reproduction:** • Name organs of plant and human reproductive systems **Musculoskeletal:** • State that some muscles are stronger than others	**Atoms, elements compounds:** • Can recognise that all matter is made of atoms **Chemical reactions:** • Recognise that different acids and alkalis have different strengths and indicators are used to show this **Materials:** • Recognise that different materials have different properties **Pure and impure substances:** • List some mixtures **The Earth and the atmosphere:** • Humans use the Earth as a source of resources and these are limited, and that there are different types of rock **The particulate nature of matter:** • Name the three states of matter and list the changes of state **The Periodic Table:** • All elements currently known may be found listed in the Periodic Table	**Energy:** • Recognise what energy is and where it is stored, that appliances have power ratings (W, kW). Use a thermometer M**otion and Forces:** • **S**tate what speed is, name some forces and their effects **Waves:** • State that light moves at the speed of light; identify objects that form images. State how sound is produced, that it cannot travel through a vacuum **Electricity and electromagnetism:** • Recall that circuits must be complete; the units for current, resistance and potential difference; types of magnets; how poles behave; name the three magnetic materials **Space:** • State the length of a day, month and year, that gravity always pulls towards the centre of an object and list planets in and seasons in order	**Experimental Skills and Investigation:** • Ask questions based on behaviour of the world **Measurement:** • Name some chemicals, and some SI units **Scientific Attitudes:** • State some theories built on evidence