LEVEL DESCRIPTIONS

LEVEL DESCRIPTIONS: ART AND DESIGN

Level 1

Pupils respond to ideas. They explore a variety of materials and processes to create their own work. They describe what they think and feel about the work of others and what they have done in their own work.

Level 2

Pupils explore ideas and make some choices about what they will do. They investigate the nature and qualities of different materials and processes, exercising some control over those they use in their work. They describe some of the characteristics of different kinds of art, craft and design. They suggest ways to improve their own work.

Level 3

Pupils explore ideas in different ways, collecting information and practical resources in order to make informed choices about their work. They investigate and use the qualities of materials and processes to develop their own practical skills and communicate their ideas and meanings. They describe the work of others commenting on the ideas and purposes that they encounter. They use this to adapt and improve aspects of their own work when making images and artefacts for different purposes.

Level 4

Pupils use a variety of approaches to explore and experiment with ideas, information and resources in order to develop their intentions. They investigate and develop a range of practical skills and use the qualities of materials and processes purposefully to suit their intentions when designing and making. They compare and comment on differing ideas, methods and approaches used by artists, craftspeople and designers, relating these to the contexts in which the work was made. They discuss their own work and that of others and consider how they might adapt and refine their ideas, skills and processes

Level 5

Pupils take some creative risks when exploring, experimenting and responding to ideas and selecting information and resources in order to develop their work. When designing and making, they develop and use their technical knowledge and skills to manipulate the qualities of materials, processes and the formal elements appropriately. They consider and discuss the ideas, methods and approaches that are used by artists, craftspeople and designers, relating these to both context and purpose. They evaluate their own work and that of others, reflecting on their own view of its purpose and meaning. They are able to adapt and refine their ideas, processes and intentions.

Level 6

Pupils accept creative risks, exploring and experimenting with ideas independently and inventively and using a range of appropriate resources imaginatively to develop, design and make work. They apply their technical knowledge and skills to realise

their intentions, using the qualities of materials, processes and the formal elements effectively. They interpret and explain how ideas and meanings are conveyed by artists, craftspeople and designers, recognising the varied characteristics of different historical, social and cultural contexts. They provide a reasoned evaluation of the purpose and meaning of their own work and that of others. They use their critical understanding to develop their own views and practice.

Level 7

Pupils learn from taking creative risks that help them to form and develop their ideas and to create purposeful, imaginative work with some originality. They demonstrate confident understanding and use of materials, processes and the formal elements, combining these thoughtfully to realise their intentions. They analyse and comment on their own and others' work, appreciating how codes and conventions are used to express ideas in different genres, styles and traditions. They explain how and why their understanding of the work of others affects their own ideas, values and practice.

Level 8

Pupils develop, express and realise ideas in often original ways, confidently exploiting what they learn from taking creative risks and from their understanding of creative processes. They exploit the potential of materials and processes independently, making both intuitive and analytical judgements to develop and realise their intentions. They analyse, engage with, and question critically aspects of their own and others' work, identifying how beliefs, values and meanings are expressed and shared. They confidently express reasoned judgements about their own work and that of others, demonstrating analytical, critical and contextual understanding.

Exceptional performance

Pupils are in command of their creative practice, recognising and using a variety of strategies to develop ideas that are personal, original and imaginative. They use the differing qualities and potential of materials and processes with deliberation and maturity in order to create work that successfully fulfils their intentions. They critically engage with their own and others' work, identifying why ideas and meanings are subject to different interpretations and using their understanding to extend their thinking and practical work. They extend their ideas and sustain their investigations by responding to new possibilities and meanings. They communicate their own ideas, insights and views.

LEVEL DESCRIPTIONS: CITIZENSHIP

Level 1

Pupils ask questions about issues that are suggested to them. They share their ideas about these issues with others. They begin to recognise that all people have needs and wants. They identify some of the groups they belong to and recognise some similarities and differences between people. They take part in some of the decisions that affect them and their communities.

Level 2

Pupils ask questions to find out about the different groups and communities they belong to. They select information from given sources to find answers to these and other questions. They discuss what is fair and unfair in different situations and identify the difference between peoples' needs and wants. They identify similarities and differences between themselves and between the communities to which they belong. They give opinions about issues that affect them and suggest how things might be improved in their community through the actions that they or others take.

Level 3

Pupils begin to explore issues that affect people in their neighbourhood and wider communities in different ways. They find answers to questions using different sources. They discuss issues and communicate their ideas to others and begin to acknowledge different viewpoints. They recognise that in a democracy people have a say in what happens locally and nationally. They describe some of the rights and responsibilities people have towards each other and the environment. They describe some of the different features of their communities and how they are changing. They identify what could be done to change things in communities, plan some action and take part in decision-making activities with others, in familiar contexts.

Level 4

Pupils investigate issues affecting communities using a range of sources. They identify different viewpoints involved. They make informed contributions to discussions and debates giving some reasons for their view. They begin to explain some of the different ways in which people can participate in democracy in the UK and how they can change things. They discuss what is fair and unfair and describe how justice is applied in some situations. They consider situations where rights or responsibilities conflict. They begin to explore some of the diverse groups and communities in the UK and the wider world, identifying how these relate to their own identities and communities. They work with others to plan and carry out a course of action to address issues that they feel are significant in their communities.

Level 5

Pupils use different methods of enquiry and sources of information to investigate issues. They identify a range of viewpoints, weighing up different ideas and draw some conclusions. They discuss their arguments clearly, giving relevant reasons for their views. They describe key features of the political and justice systems in the UK and consider what is fair and unfair to individuals and groups in different situations. They describe situations where rights and interests conflict. They give examples of how the UK is a diverse society and is interconnected with the wider world. They

work with others to plan and carry out actions aimed at making a difference to the lives of others. They explain the impact of actions taken.

Level 6

Pupils decide on appropriate questions and research strategies to investigate issues affecting society. They interpret different sources of information and begin to assess these for validity. They are aware of the diversity of viewpoints and describe some of the influences that shape these. They develop structured and balanced arguments, challenging others' assumptions or ideas. They begin to compare democracy and justice in the UK and different parts of the world. They explain how different rights need to be protected, supported and balanced, drawing on examples from local to global contexts. They describe changing identities and communities in the UK and explain some of the political, social, economic interdependencies with the wider world. They present a persuasive argument for a particular course of action, giving reasons for their view. They work with others to negotiate, plan and carry out actions aimed at improving or influencing the community and, after reflecting on the extent of their success, suggest what they might do next.

Level 7

Pupils use a range of research strategies and sources with confidence to explore issues affecting society. They select and evaluate relevant evidence to question different ideas and views including their own. They show understanding of the complexity of issues affecting different stakeholders in communities. They make reasoned and persuasive arguments, representing the different viewpoints, including those they do not agree with. They begin to evaluate the roles citizens can take in shaping decisions and holding those in power to account. They compare democracy and justice in the UK with different forms of government in the world. They weigh up the implications of issues for groups in society, including in situations where rights and obligations are contested or in tension. They analyse the reasons for change in UK society and its diversity, over time. They work with others to initiate, negotiate, plan and carry out appropriate courses of action in the local and wider community to bring about change for the common good. They evaluate the impact of their actions and suggest alternate approaches.

Level 8

Pupils carry out different types of research into a range of issues, problems and events and analyse how these affect groups and communities in different parts of the world. They make connections between information derived from different sources and their own experience in order to make perceptive observations and coherent arguments. They show a detailed understanding of democracy and justice, rights and responsibilities, identities and diversity, and how these change over time. They explore and question the ways in which justice, laws and governments operate in different places and evaluate how citizens use democratic processes and the actions they can take to bring about or resist change in society. They hypothesise alternative courses of action exploring the different implications of each. They work with others to put courses of action to the test and evaluate the impact and limitations of these for the wider community.

Exceptional performance

Pupils research complex issues and challenges facing society, selecting appropriate methodologies and drawing on their own and others' experience of taking action. They assess and evaluate the validity of a wide range of viewpoints and evidence,

synthesising them to draw clear conclusions. They present coherent, perceptive and compelling arguments. They take an overview of democracy and justice, rights and responsibilities, identities and diversity, and make sophisticated observations relating to the connections between them. They evaluate the impact and limitations of policies affecting communities (local to global) now and in the future and suggest alternatives. They debate challenging questions about the relationship between the UK and the wider world and the kind of society they as citizens would like to live in. They evaluate the approaches citizens can take to improve society through individual and collective actions, and democratic processes. They take a leading role in defining, negotiating and undertaking courses of action with others to address issues and problems in society.

LEVEL DESCRIPTIONS: DESIGN AND TECHNOLOGY

Level 1

Pupils generate ideas for purposeful designs and recognise characteristics of familiar products. They show that, with help, they can create products for a user and purpose, using their practical ideas. They use models, pictures and words to describe what they want to do. They explain what they are making and which tools they are using. They use tools and manipulate materials with help, where needed. They talk about their own and other people's work in simple terms and describe how a product works.

Level 2

Pupils generate ideas based on their investigations of products. They use models, pictures and words to describe their designs. They plan what to do next based on their experience of working with materials and components. They select appropriate tools, techniques and materials, explaining their choices. They assemble, join and combine materials and components in a variety of ways to make functional products. They recognise what they have done well and suggest things they could do better in the future.

Level 3

Pupils generate ideas and recognise that their designs have to meet a range of different needs and users. They clarify ideas when asked and use words, labelled sketches and models to communicate the details of their designs. They think ahead about the order of their work and make realistic plans for achieving their aims. They choose appropriate tools, equipment, components and techniques to make their functional products. They apply their knowledge and understanding of the nature of materials to cut shape and join them with some accuracy. After reflecting on the design and make process and their products, they identify some improvements.

Level 4

Pupils generate ideas by collecting and using information. They take users' views about aesthetic and technical issues into account as they respond to briefs. They communicate alternative ideas using words, labelled sketches and models, showing that they are aware of constraints. They use some ideas from others' designing to inform their own work. They produce step-by-step plans and then select and work with a range of tools and equipment. They apply their knowledge and understanding of materials, ingredients and components, and work with them with some accuracy, paying attention to quality of finish and to function. They identify what is working well and what could be improved to overcome technical problems. They reflect on their designs as they develop, recognising the significance of knowledge and previous experience.

Level 5

Pupils develop ideas by drawing on and using various sources of information. They clarify their ideas through discussion, drawing and modelling, showing understanding of aesthetic and economic dimensions. They respond to briefs showing understanding of how culture and society are reflected in familiar products when developing and communicating their own ideas. They show that they are aware of

constraints as they apply knowledge and understanding of materials, ingredients and techniques. They use understanding of others' designing as they develop their work. They work from their own detailed plans, modifying them where appropriate. They work with a range of tools, materials, ingredients, equipment, components and processes with some precision. They check their work as it develops, solve technical problems and show some evidence of creativity as they modify their approach in the light of progress. They test and evaluate their products, showing that they understand the situations in which the products will function.

Level 6

Pupils draw on and use a range of sources of information, and show that they understand the form and function of familiar products as they develop and model ideas. They respond creatively to briefs, exploring and testing their design thinking. They develop detailed criteria for their products and use these to explore proposals. They apply their knowledge and understanding by responding to several aspects of the problem. They recognise the significance of others' designing and modify their approaches accordingly. They produce plans that outline alternative methods of making progress. They work with a range of tools, materials, ingredients, equipment, components and processes, showing that they understand their characteristics. They check their work as it develops and solve technical problems by modifying their approach in the light of progress. They evaluate how effectively they have used information sources, using the results of their research to inform their judgements when developing products. They evaluate their products as they are being used, and identify ways of improving them.

Level 7

Pupils use a wide range of appropriate sources of information when developing and modelling ideas. They investigate form, function and production processes as they respond creatively to briefs. They apply their knowledge and understanding, recognising the different needs of a range of users, and search for trends and patterns in existing solutions as they develop fully realistic products. They use their understanding of others' designing to inform their own as they communicate creative ideas. They produce plans that predict the time needed to carry out the main stages of making products. They work with a range of tools, materials, ingredients, equipment, components and processes, taking full account of their characteristics. They adapt their methods of manufacture to changing circumstances as they solve technical problems, providing a sound explanation for any change from the design proposal. They select appropriate techniques to evaluate how their products would perform when used and modify their products in the light of this evaluation to improve their performance.

Level 8

Pupils use a range of strategies to fully develop and model appropriate ideas, responding to information they have identified. They identify conflicting demands on a product and respond creatively to briefs, suggesting ways forward and explaining how their ideas address these demands. When applying knowledge they make decisions on materials, ingredients and techniques based on their understanding of physical properties and working characteristics. They use their understanding of others' designing by reinterpreting and applying learning in new contexts. They organise their work so that they can carry out processes accurately and consistently, and use tools, equipment, materials, ingredients and components with precision. They use accurate testing to inform their judgements when solving technical

problems. They identify a broad range of criteria for evaluating their products, clearly relating their findings to environmental, ethical, and social and cultural dimensions.

Exceptional Performance

Pupils seek out information to help their design thinking. They recognise how products contribute to lifestyle and choices of a variety of client groups as they develop and model ideas in an innovative way. Responding creatively to briefs, they are discriminating in their selection and use of information sources to support their work. They interpret and apply knowledge and understanding creatively in new design contexts and communicate ideas in new or unexpected ways. They use understanding of others' designing in innovative ways. They work with tools, equipment, materials, ingredients and components to a high degree of precision. They make products that are reliable and robust and that fully meet the quality requirements given in the design proposal. They reflect critically and effectively throughout designing and making processes.

LEVEL DESCRIPTIONS: ENGLISH

ATTAINMENT TARGET 1: EN1 SPEAKING AND LISTENING

Level 1

Pupils talk about matters of immediate interest. They listen to others and usually respond appropriately. They convey simple meanings to a range of listeners, speaking audibly, and begin to extend their ideas or accounts by providing some detail.

Level 2

Pupils begin to show confidence in talking and listening, particularly where the topics interest them. On occasions, they show awareness of the needs of the listener by including relevant detail. In developing and explaining their ideas they speak clearly and use a growing vocabulary. They usually listen carefully and respond with increasing appropriateness to what others say. They are beginning to be aware that in some situations a more formal vocabulary and tone of voice are used.

Level 3

Pupils talk and listen confidently in different contexts, exploring and communicating ideas. In discussion, they show understanding of the main points. Through relevant comments and questions, they show they have listened carefully. They begin to adapt what they say to the needs of the listener, varying the use of vocabulary and the level of detail. They are beginning to be aware of standard English and when it is used.

Level 4

Pupils talk and listen with confidence in an increasing range of contexts. Their talk is adapted to the purpose: developing ideas thoughtfully, describing events and conveying their opinions clearly. They listen carefully in discussions, making contributions and asking questions that are responsive to others' ideas and views. They adapt their spoken language appropriately and use some of the features of standard English vocabulary and grammar.

Level 5

Pupils talk and listen with confidence in an increasing range of contexts. Their talk is adapted to the purpose: developing ideas thoughtfully, describing events and conveying their opinions clearly. They begin to vary their expression and vocabulary. They listen carefully in discussions, making contributions and asking questions that are responsive to others' ideas and views. They use some of the features of standard English vocabulary and grammar.

Level 6

Pupils adapt their talk to the demands of different contexts, purposes and audiences with increasing confidence. Their talk engages the interest of the listener through the variety and liveliness of both vocabulary and expression. Pupils take an active part in

English

discussions, taking different roles and showing understanding of ideas and sensitivity to others. They demonstrate their knowledge of language variety and usage effectively and use standard English fluently in formal situations.

Level 7

Pupils are confident in matching their talk to the demands of different contexts, including those that are unfamiliar. They use vocabulary in precise and creative ways and organise their talk to communicate clearly. They make significant contributions to discussions, evaluating others' ideas and varying how and when they participate. They use standard English confidently in situations that require it.

Level 8

Pupils maintain and develop their talk purposefully in a range of contexts. They structure what they say clearly, using apt vocabulary and appropriate intonation and emphasis. They make a range of contributions that show they have listened perceptively and are sensitive to the development of discussions. They use standard English confidently in a range of situations, adapting as necessary.

Exceptional Performance

Pupils select and use structures, styles and registers appropriately, adapting flexibly to a range of contexts and varying their vocabulary and expression confidently for a range of purposes and audiences. They initiate and sustain discussion through the sensitive use of a variety of contributions. They take a leading role in discussion and listen with concentration and understanding to varied and complex speech. They show assured and fluent use of standard English in a range of situations and for a variety of purposes.

ATTAINMENT TARGET 2: EN2 READING

Level 1

Pupils recognise familiar words in simple texts. They use their knowledge of letters and sound-symbol relationships in order to read words and to establish meaning when reading aloud. In these activities they sometimes require support. They express their response to poems, stories and non-fiction by identifying aspects they like.

Level 2

Pupils' reading of simple texts shows understanding and is generally accurate. They express opinions about major events or ideas in stories, poems and non-fiction. They use more than one strategy, such as phonic, graphic, syntactic and contextual, in reading unfamiliar words and establishing meaning.

Level 3

Pupils read a range of texts fluently and accurately. They read independently, using strategies appropriately to establish meaning. In responding to fiction and non-fiction in a range of modes they show understanding of the main points and express preferences. They use their knowledge of the alphabet and of search techniques to locate sources and find information.

Level 4

In responding to a range of texts, pupils show understanding of significant ideas, themes, events and characters, beginning to use inference and deduction. They understand that texts reflect the time and culture in which they were written. They refer to the text when explaining their views and are able to locate and use ideas and information.

Level 5

Pupils show understanding of a range of texts, selecting essential points and using inference and deduction where appropriate. In their responses, they identify key features, themes and characters and select sentences, phrases and relevant information to support their views. They understand that texts fit into historical and literary traditions. They retrieve and collate information from a range of sources.

Level 6

In reading and discussing a range of texts, pupils identify different layers of meaning and comment on their significance and effect. They give personal responses to literary texts, referring to aspects of language, structure and themes in justifying their views, and making connections between texts from different times and cultures and their own experiences. They summarise a range of information from different sources.

Level 7

Pupils show understanding of the ways in which meaning and information are conveyed in a range of texts. They articulate personal and critical responses to poems, plays and novels, showing awareness of their thematic, structural and linguistic features. They understand why some texts are particularly valued and

influential. They select, synthesise and compare information from a variety of sources.

Level 8

Pupils' responses show their appreciation of, and ability to comment on, a range of texts, and they evaluate how authors achieve their effects through the use of linguistic, structural and presentational devices. They select and analyse information and ideas, and comment on how these are conveyed in different texts. They explore some of the ways in which texts from different times and cultures have influenced literature and society.

Exceptional Performance

Pupils confidently sustain their responses to a demanding range of texts across different times and cultures, developing their ideas and referring in detail to aspects of language, structure and presentation. They make apt and careful comparisons between texts, including consideration of audience, purpose and form. They identify and analyse argument, opinion and alternative interpretations, making cross-references where appropriate.

ATTAINMENT TARGET 3: EN3 WRITING

Level 1

Pupils' writing communicates meaning through simple words and phrases. In their reading or their writing, pupils begin to show awareness of how full stops are used. Letters are usually clearly shaped and correctly orientated.

Level 2

Pupils' writing communicates meaning in both narrative and non-narrative forms, using appropriate and interesting vocabulary, and showing some awareness of the reader. Ideas are developed in a sequence of sentences, sometimes demarcated by capital letters and full stops. Simple, monosyllabic words are usually spelt correctly, and where there are inaccuracies the alternative is phonetically plausible. In handwriting, letters are accurately formed and consistent in size.

Level 3

Pupils' writing is often organised, imaginative and clear. The main features of different forms of texts are used appropriately, beginning to be adapted to different readers. Sequences of sentences extend ideas logically and words are chosen for variety and interest. The basic grammatical structure of sentences is usually correct. Spelling is usually accurate, including that of common, polysyllabic words. Punctuation to mark sentences - full stops, capital letters and question marks - is used accurately. Handwriting is joined and legible.

Level 4

Pupils' writing in a range of forms is lively and thoughtful. Ideas are often sustained and developed in interesting ways, with organisation generally appropriate for purpose. Vocabulary choices are often adventurous and words are used for effect. Pupils are beginning to use grammatically complex sentences, extending meaning. Spelling, including that of polysyllabic words that conform to regular patterns, is generally accurate. Full stops, capital letters and question marks are used correctly, and pupils are beginning to use punctuation within sentences. Handwriting style is fluent, joined and legible.

Level 5

Pupils' writing is varied and interesting, conveying meaning clearly in a range of forms for different readers, using a more formal style where appropriate. Vocabulary choices are imaginative and words are used precisely. Sentences, including complex ones, and paragraphs are coherent, clear and well developed. Words with complex regular patterns are usually spelt correctly. A range of punctuation, including commas, apostrophes and inverted commas, is usually used accurately. Handwriting is joined, clear and fluent and, where appropriate, is adapted to a range of tasks.

Level 6

Pupils' writing is fluent and often engages and sustains the reader's interest, showing some adaptation of style and register to different forms, including using an impersonal style where appropriate. Pupils use a range of sentence structures and varied vocabulary to create effects. Spelling, including that of irregular words, is generally accurate. Handwriting is neat and legible. A range of punctuation is usually used correctly to clarify meaning, and ideas are organised into paragraphs.

Level 7

Pupils' writing is confident and shows appropriate and imaginative choices of style in a range of forms. Characters and settings are developed in their narrative writing. Their non-fiction writing is coherent and gives clear points of view, taking account of different perspectives. Grammatical features and vocabulary are used accurately and effectively. Spelling is correct, including that of complex irregular words. Work is legible and attractively presented. Paragraphing and correct punctuation are used to make the sequence of events or ideas coherent and clear to the reader.

Level 8

Pupils show creativity in the way they select specific features or expressions to convey effects and to interest the reader. Their narrative writing shows control of characters, events and settings, and shows variety in structure. In non-fiction, they express complex ideas clearly and present them coherently, anticipating and addressing a range of different viewpoints. Their use of vocabulary and grammar enables fine distinctions to be made or emphasis achieved. Their writing shows a clear grasp of the use of punctuation and paragraphing.

Exceptional Performance

Pupils' writing is original, has shape and impact, shows control of a range of styles and maintains the interest of the reader throughout. Narratives use structure as well as vocabulary for a range of imaginative effects, and non-fiction is coherent, reasoned and persuasive, conveying complex perspectives. A variety of grammatical constructions and punctuation is used accurately, appropriately and with sensitivity. Paragraphs are well constructed and linked in order to clarify the organisation of the writing as a whole.

LEVEL DESCRIPTIONS: GEOGRAPHY

Level 1

Pupils show their knowledge, skills and understanding in studies at a local scale. They recognise and make observations about physical and human features of localities. They express their views on features of the environment of a locality. They use resources that are given to them, and their own observations, to ask and respond to questions about places and environments.

Level 2

Pupils show their knowledge, skills and understanding in studies at a local scale. They describe physical and human features of places, and recognise and make observations about those features that give places their character. They show an awareness of places beyond their own locality. They express views on the environment of a locality and recognise how people affect the environment. They carry out simple tasks and select information using resources that are given to them. They use this information and their own observations to help them ask and respond to questions about places and environments. They begin to use appropriate geographical vocabulary.

Level 3

Pupils show their developing knowledge and understanding of places by describing the physical and human features of different localities and offering explanations for the location of some of those features. They recognise that different places may have both similar and different characteristics that influence the lives and activities of people living there. They recognise that people seek to improve and sustain environments. They offer simple reasons for their observations and views about these places and environments. They use skills and sources of evidence to respond to a range of geographical questions, and begin to use appropriate vocabulary to communicate their findings.

Level 4

Pupils show knowledge and understanding of aspects of the geography of the UK and the wider world. They recognise and describe the physical and human features of places and begin to do this within a wider locational framework. They describe how physical and human processes can change the features of places and how these changes affect the lives and activities of people living there. They recognise and describe simple geographical patterns. They understand that people can both improve and damage the environment. They offer reasons for their own views about environmental change and recognise that other people may hold different views. Drawing on their knowledge and understanding, they begin to suggest suitable geographical questions, and use a range of geographical skills to investigate places and environments. They use primary and secondary sources of evidence in their investigations and communicate their findings using appropriate vocabulary.

Level 5

Pupils show increasing depth of knowledge and understanding of aspects of the geography of the UK and the wider world. They use this to describe physical and human characteristics of places within a wider locational and contextual framework.

They describe how physical and human processes can lead to similarities and differences in the environments of different places and in the lives of people who live there. They describe and begin to explain geographical patterns. They understand some ways that human activities cause environments to change. They demonstrate an awareness of sustainable development and recognise the range of views held about environmental interaction and change. Drawing on their knowledge and understanding, they suggest relevant geographical questions and use appropriate geographical skills to investigate places and environments. They select and begin to evaluate sources to establish evidence for their investigations. They suggest plausible conclusions to their investigations and present their findings both graphically and in writing using appropriate vocabulary.

Level 6

Pupils use their knowledge and understanding of the geography of the UK and the wider world to describe and begin to analyse physical and human characteristics of places in a range of locations, contexts and scales. They explain physical and human processes and recognise that these interact to produce the distinctive characteristics of places. They begin to explain the ways in which physical and human processes lead to diversity and change in places. They identify geographical patterns at a range of scales. They recognise how conflicting demands on the environment may arise and compare sustainable and other approaches to managing environments. They appreciate that different values and attitudes, including their own, result in different approaches to environmental interaction and change. Drawing on their knowledge and understanding, they suggest appropriate sequences of investigation into relevant geographical questions and issues and use geographical skills effectively when carrying these out. They evaluate sources to establish evidence for their investigations. They present their findings in a coherent way using appropriate methods and vocabulary and reach conclusions that are consistent with the evidence.

Level 7

Pupils make links in their knowledge and understanding of the geography of the UK and the wider world. They use these links to analyse the physical and human characteristics of places, drawing on their knowledge of a wide range of locations, contexts and scales. They explain interactions within and between physical and human processes and show how these interactions create diversity and interdependence and help change places and environments. They identify and analyse the geographical patterns that result from these interactions at a range of scales. They understand that many factors influence the decisions made about sustainable and other approaches to developing places and environments, and use this understanding to explain the resulting changes. They appreciate that the environment in a place and the lives of the people who live there are affected by actions and events in other places. They recognise that human actions, including their own, may have unintended environmental consequences and that change sometimes leads to conflict. Drawing on their knowledge and understanding, they plan their own sequences of investigation into relevant geographical questions and issues and use a wide range geographical skills accurately when carrying these out. They evaluate sources by considering critically their origin, nature and purpose, present well argued summaries of their investigations, use accurate geographical vocabulary and begin to reach substantiated conclusions.

Level 8

Pupils use their knowledge and understanding of the geography of the UK and the wider world to analyse the physical and human characteristics of places. They explain changes in the characteristics of places over time by drawing on their knowledge and understanding of a wide range of locations, contexts and scales. They analyse the interactions within and between physical and human processes and show how these interactions create diversity and interdependence and help change places and environments. They describe and analyse the geographical patterns these interactions create at a range of scales and the changes that result. They analyse different approaches to developing places and environments and explain the causes and consequences of environmental change. They show how the interaction between people and environments can result in complex and unintended changes. They understand and describe a range of views about environmental interaction. Drawing on their knowledge and understanding, they show independence in identifying appropriate geographical questions and issues, and in using an effective sequence of investigation. They select a wide range of skills and use them effectively and accurately. They evaluate critically a range of sources, they present full and coherently argued summaries of their investigations and reach substantiated conclusions.

Exceptional Performance

Pupils use their detailed knowledge and understanding of the geography of the UK and the wider world to explain and predict change in the physical and human characteristics of places over time across a wide range of locations, contexts and scales. They explain complex interactions within and between physical and human processes and show how these interactions help change places and environments. They analyse complex geographical patterns. They understand alternative approaches to development and their implications for the quality of life in different places. They assess the relative merits of different ways of tackling environmental issues and justify their views about these different approaches. They show how considerations of sustainable development can affect their own lives as well as the planning and management of environments and resources. They illustrate this with a full range of examples. They draw selectively on geographical ideas and theories, and use accurately a wide range of appropriate skills and sources of evidence. They carry out geographical investigations independently at different scales. They evaluate a wide range sources critically and present coherent arguments and effective, accurate and well-substantiated conclusions.

LEVEL DESCRIPTIONS: HISTORY

Level 1

Pupils show their emerging knowledge and understanding of the past by recognising the distinction between present and past, by placing a few events and objects in order, by using common words and phrases about the passing of time and by recounting episodes from stories about the past. They use sources to answer simple questions about the past.

Level 2

Pupils show their developing knowledge and understanding of the past by using common words and phrases about the passing of time, by placing events and objects in order, by recognising that their own lives are different from the lives of people in the past and by describing some of the topics, events and people they have studied. They are beginning to recognise that there are reasons why people in the past acted as they did. They are beginning to identify some of the different ways in which the past has been represented. They observe or handle sources to find answers to questions about the past.

Level 3

Pupils show their increasing knowledge and understanding of the past by using dates and terms, by describing some of the main events, people and periods they have studied and by placing them into different periods of time. They begin to recognise some of the similarities and differences between these periods and are beginning to suggest causes and consequences of the main events and changes. They identify some of the different ways in which the past has been represented. They use sources to find answers to questions about the past.

Level 4

Pupils show their knowledge and understanding of local, national and international history by describing some of the main events, people and periods they have studied, and by identifying where these fit within a chronological framework. They describe characteristic features of past societies and periods to identify change and continuity within and across different periods and to identify some causes and consequences of the main events and changes. They identify and describe different ways in which the past has been interpreted. When finding answers to historical questions, they begin to use information as evidence to test hypotheses. They begin to produce structured work, making appropriate use of dates and terms.

Level 5

Pupils show their knowledge and understanding of local, national and international history by describing events, people and some features of past societies and periods in the context of their developing chronological framework. They begin to recognise and describe the nature and extent of diversity, change and continuity, and to suggest relationships between causes. They suggest some reasons for different interpretations of the past and they begin to recognise why some events, people and changes might be judged as more historically significant than others. They investigate historical problems and issues and begin to ask their own questions. They begin to evaluate sources to establish evidence for particular enquiries. They select

and deploy information and make appropriate use of historical terminology to support and structure their work.

Level 6

Pupils show their knowledge and understanding of local, national and international history by beginning to analyse the nature and extent of diversity, change and continuity within and across different periods. They begin to explain relationships between causes. They begin to explain how and why different interpretations of the past have arisen or been constructed. They explore criteria for making judgements about the historical significance of events, people and changes. They investigate historical problems and issues, asking and beginning to refine their own questions. They evaluate sources to establish relevant evidence for particular enquiries. They select, organise and deploy relevant information and make appropriate use of historical terminology to produce structured work.

Level 7

Pupils show their knowledge and understanding of local, national and international history by analysing historical change and continuity, diversity and causation. They explain how and why different interpretations of the past have arisen or been constructed. They begin to explain how the significance of events, people and changes has varied according to different perspectives. They investigate historical problems and issues, asking and refining their own questions and beginning to reflect on the process undertaken. When establishing the evidence for a particular enquiry, pupils consider critically issues surrounding the origin, nature and purpose of sources. They select, organise and use relevant information and make appropriate use of historical terminology to produce well-structured work.

Level 8

Pupils show their knowledge and understanding of local, national and international history, constructing substantiated analyses about historical change and continuity, diversity and causation. They analyse and explain a range of historical interpretations and different judgements about historical significance. They suggest lines of enquiry into historical problems and issues, refining their methods of investigation. They evaluate critically a range of sources and reach substantiated conclusions independently. They use historical terminology confidently, reflecting on the way in which terms can change meaning according to context. They produce precise and coherent work.

Exceptional Performance

Pupils show a confident and extensive knowledge and understanding of local, national and international history. They use this to frame and pursue enquiries about historical change and continuity, diversity and causation, constructing well-substantiated, analytic arguments within a wide frame of historical reference. They analyse links between events and developments that took place in different countries and in different periods. When exploring historical interpretations and judgements about significance, pupils construct convincing and substantiated arguments and evaluations based on their understanding of the historical context. They evaluate critically a wide range of sources, reaching substantiated conclusions independently. They use historical terminology confidently, reflectively and critically. They consistently produce precise and coherent narratives, descriptions and explanations.

LEVEL DESCRIPTIONS: ICT

Level 1

Pupils navigate on-screen resources to explore and locate information. They investigate imaginary and virtual worlds and explore options. They capture information and share their work with others. They work with text, images and sound to explore and share their ideas. They explore how devices respond to commands. They use ICT safely by following instructions. They understand that work can be saved and retrieved for later use. They talk about their use of ICT.

Level 2

Pupils find and use information to answer questions. They sort and organise information and present it in different forms. They use simple editing and formatting techniques to develop their work. They use ICT to communicate with others following instructions on safe use. They plan and give instructions to make things happen or to control devices and describe the effects. They make informed choices when using ICT to explore what happens in real and imaginary situations. They describe how they use ICT to develop their work.

Level 3

Pupils search for and use information from a range of sources and make judgements about its usefulness when following straightforward lines of enquiry. They collect, record and organise data to answer questions and present findings. They use editing and formatting techniques to develop and refine their work to improve its quality and presentation. They use sequences of instructions to control devices and achieve specific outcomes. They answer questions when using ICT models and simulations. They use communication tools to share and exchange their ideas with others, and follow strategies for staying safe. They describe their use of ICT inside and outside school.

Level 4

Pupils refine searches to find, select and use information, questioning its reliability. Pupils understand the need for collecting information in a format that is suitable for processing. They interpret their findings, question plausibility and recognise that poor-quality information leads to unreliable results. They develop simple ICT-based models to explore patterns and relationships, and make predictions about the consequences of their decisions. They plan, test and refine sequences of instructions. They capture data using sensors to support investigations. They create and combine different forms of information, refining and presenting it for a particular purpose, showing an awareness of audience and the need for quality. They communicate and exchange information and ideas with others, collaborating to develop and improve work. They understand the benefits of online communication and can manage some of the risks associated with the digital environment. They compare their use of ICT with other methods and with its use outside school.

Level 5

Pupils combine ICT tools within the overall structure of an ICT solution. They select the information they need for different purposes, check its accuracy and organise it in a form suitable for processing. They use ICT to structure, refine and present information in different forms and styles for specific purposes and audiences. They exchange information and ideas with others in a variety of ways, including using digital communications. They create sequences of instructions and understand the need to be precise when framing and sequencing instructions. They are systematic in changing the variables in an ICT-based model and explain the impact of the changes. They use ICT to organise, store and retrieve information using logical and appropriate structures. They use ICT safely and responsibly. They discuss their knowledge and experience of using ICT and their observations of its use outside school. They assess the use of ICT in their work and are able to reflect critically in order to make improvements in subsequent work. They use appropriate evaluation criteria to critically evaluate the fitness for purpose of their work as it progresses.

Level 6

Pupils plan and design ICT-based solutions to meet a specific purpose and audience, demonstrating increased integration and efficiency in their use of ICT tools. They develop and refine their work to enhance its quality, using a greater range and complexity of information. Where necessary, they use complex lines of enquiry to test hypotheses. They present their ideas in a variety of ways and show a clear sense of audience. They develop, try out and refine sequences of instructions and show efficiency in framing these instructions, using sub-routines where appropriate. They use ICT-based models to make predictions and vary the rules within the models. They assess the validity of these models by comparing their behaviour with information from other sources. They plan and review their work, creating a logically structured portfolio of digital evidence of their learning. They discuss the impact of ICT on society.

Level 7

Pupils design and implement systems. They are able to scope the information flow required to develop an information system. They combine information from a variety of ICT-based and other sources for presentation to different audiences. They identify the advantages and limitations of different information-handling applications. They select and use information to develop systems suited to work in a variety of contexts, translating enquiries expressed in ordinary language into the form required by the system. They develop, test and refine sequences of instructions as part of an ICT system to solve problems. They design ICT-based models and procedures with variables to meet particular needs. They consider the benefits and limitations of ICT tools and information sources and of the results they produce, and they use these results to inform future judgements about the quality of their work. They make use of audience and user feedback to refine and enhance their ICT solutions. They take part in informed discussions about the use of ICT and its impact on society.

Level 8

Pupils independently select appropriate information sources and ICT tools for specific tasks, taking into account ease of use and suitability. They design successful ways to collect and prepare information for processing. They design and implement systems for others to use. They take part in informed discussions about the social, economic, ethical and moral issues raised by ICT.

Exceptional Performance

Pupils evaluate software packages and ICT-based models, analysing the situations for which they were developed and assessing their efficiency, ease of use and appropriateness. They suggest refinements to existing systems and design, implement and document systems for others to use, predicting some of the consequences that could arise from the use of such systems. When discussing their own and others' use of ICT, they use their knowledge and experience of information systems to inform their views on the social, economic, ethical and moral issues raised by ICT.

LEVEL DESCRIPTIONS: MATHEMATICS

ATTAINMENT TARGET 1: MA1 USING AND APPLYING MATHEMATICS

Level 1

Pupils use mathematics as an integral part of classroom activities. They represent their work with objects or pictures and discuss it. They recognise and use a simple pattern or relationship.

Level 2

Pupils select the mathematics they use in some classroom activities. They discuss their work using mathematical language and are beginning to represent it using symbols and simple diagrams. They explain why an answer is correct.

Level 3

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

Level 4

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

Level 5

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

Level 6

Pupils carry out substantial tasks and solve quite complex problems by independently and systematically breaking them down into smaller, more manageable tasks. They interpret, discuss and synthesise information presented in a variety of mathematical forms, relating findings to the original context. Their written and spoken language explains and informs their use of diagrams. They begin to give

mathematical justifications, making connections between the current situation and situations they have encountered before.

Level 7

Starting from problems or contexts that have been presented to them, pupils explore the effects of varying values and look for invariance in models and representations, working with and without ICT. They progressively refine or extend the mathematics used, giving reasons for their choice of mathematical presentation and explaining features they have selected. They justify their generalisations, arguments or solutions, looking for equivalence to different problems with similar structures. They appreciate the difference between mathematical explanation and experimental evidence.

Level 8

Pupils develop and follow alternative approaches. They compare and evaluate representations of a situation, introducing and using a range of mathematical techniques. They reflect on their own lines of enquiry when exploring mathematical tasks. They communicate mathematical or statistical meaning to different audiences through precise and consistent use of symbols that is sustained throughout the work. They examine generalisations or solutions reached in an activity and make further progress in the activity as a result. They comment constructively on the reasoning and logic, the process employed and the results obtained.

Exceptional Performance

Pupils critically examine the strategies adopted when investigating within mathematics itself or when using mathematics to analyse tasks. They explain why different strategies were used, considering the elegance and efficiency of alternative lines of enquiry or procedures. They apply the mathematics they know in a wide range of familiar and unfamiliar contexts. They use mathematical language and symbols effectively in presenting a convincing, reasoned argument. Their reports include mathematical justifications, distinguishing between evidence and proof and explaining their solutions to problems involving a number of features or variables.

ATTAINMENT TARGET 2: MA2 NUMBER AND ALGEBRA

Level 1

Pupils count, order, combine, increase and decrease quantities when solving problems in practical contexts. They read and write the numbers involved.

Level 2

Pupils count sets of objects reliably, and use mental recall of addition and subtraction facts to 10. They begin to understand the place value of each digit in a number and use this to order numbers up to 100. They choose the appropriate operation when solving addition and subtraction problems. They use the knowledge that subtraction is the inverse of addition. They use mental calculation strategies to solve number problems involving money and measures. They recognise sequences of numbers, including odd and even numbers.

Level 3

Pupils show understanding of place value in numbers up to 1000 and use this to make approximations. They begin to use decimal notation, in the context of measures and money, and to recognise negative numbers in practical contexts such as temperature. Pupils use mental recall of addition and subtraction facts to 20 in solving problems involving larger numbers. They add and subtract numbers with two digits mentally and numbers with three digits using written methods. They use mental recall of the 2, 3, 4, 5 and 10 multiplication tables and derive the associated division facts. They solve whole-number problems involving multiplication or division including those that give rise to remainders. They use simple fractions that are several parts of a whole and recognise when two simple fractions are equivalent.

Level 4

Pupils use their understanding of place value to mentally multiply and divide whole numbers by 10 or 100. When solving number problems, they use a range of mental methods of computation with the four operations, including mental recall of multiplication facts up to 10 x 10 and quick derivation of corresponding division facts. They select efficient strategies for addition, subtraction, multiplication and division. They recognise approximate proportions of a whole and use simple fractions and percentages to describe these. They begin to use simple formulae expressed in words.

Level 5

Pupils use their understanding of place value to multiply and divide whole numbers and decimals. They order, add and subtract negative numbers in context. They use all four operations with decimals to two places. They solve simple problems involving ratio and direct proportion. They calculate fractional or percentage parts of quantities and measurements, using a calculator where appropriate. They construct, express in symbolic form and use simple formulae involving one or two operations. They use brackets appropriately. They use and interpret coordinates in all four quadrants.

Level 6

Pupils order and approximate decimals when solving numerical problems and equations, using trial and improvement methods. They evaluate one number as a fraction or percentage of another. They understand and use the equivalences

between fractions, decimals and percentages, and calculate using ratios in appropriate situations. They add and subtract fractions by writing them with a common denominator. They find and describe in words the rule for the next term or nth term of a sequence where the rule is linear. They formulate and solve linear equations with whole-number coefficients. They represent mappings expressed algebraically, and use Cartesian coordinates for graphical representation interpreting general features.

Level 7

When making estimates, pupils round to one significant figure and multiply and divide mentally. They understand the effects of multiplying and dividing by numbers between 0 and 1. They solve numerical problems involving multiplication and division with numbers of any size, using a calculator efficiently and appropriately. They understand and use proportional changes, calculating the result of any proportional change using only multiplicative methods. They find and describe in symbols the next term or nth term of a sequence where the rule is quadratic. They use algebraic and graphical methods to solve simultaneous linear equations in two variables.

Level 8

Pupils solve problems that involve calculating with powers, roots and numbers expressed in standard form. They choose to use fractions or percentages to solve problems involving repeated proportional changes or the calculation of the original quantity given the result of a proportional change. They evaluate algebraic formulae or calculate one variable, given the others, substituting fractions, decimals and negative numbers. They manipulate algebraic formulae, equations and expressions, finding common factors and multiplying two linear expressions. They solve inequalities in two variables. They sketch and interpret graphs of linear, quadratic, cubic and reciprocal functions, and graphs that model real situations.

Exceptional Performance

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

ATTAINMENT TARGET 3: MA3 SHAPE, SPACE AND MEASURES

Level 1

When working with 2-D and 3-D shapes, pupils use mathematical language to describe properties and positions. They measure and order objects using direct comparison, and order events.

Level 2

Pupils use mathematical names for common 3-D and 2-D shapes and describe their properties, including numbers of faces, edges and vertices. They distinguish between straight and turning movements, recognise angle as a measurement of turn, and right angles in turns. They begin to use everyday non-standard and standard units to measure length and mass.

Level 3

Pupils classify 3-D and 2-D shapes in various ways using mathematical properties such as reflective symmetry for 2-D shapes. They use non-standard units, standard metric units of length including finding perimeters, capacity and mass, and standard units of time, in a range of contexts.

Level 4

Pupils use and make geometric 2-D and 3-D patterns, scale drawings and models in practical contexts. They reflect simple shapes in a mirror line. They choose and use appropriate units and tools, interpreting, with appropriate accuracy, numbers on a range of measuring instruments. They find areas of simple shapes.

Level 5

When constructing models and drawing or using shapes, pupils measure and draw angles to the nearest degree and use language associated with angles. They know the angle sum of a triangle and that of angles at a point. They identify all the symmetries of 2D shapes. They convert one metric unit to another. They make sensible estimates of a range of measures in relation to everyday situations. They understand and use the formula for the area of a rectangle.

Level 6

Pupils recognise and use common 2D representations of 3D objects. They know and use the properties of quadrilaterals. They solve problems using angle and symmetry, properties of polygons and angle properties of intersecting and parallel lines, and explain these properties. They devise instructions for a computer to generate and transform shapes and paths. They understand and use appropriate formulae for finding circumferences and areas of circles, areas of plane rectilinear figures and volumes of cuboids when solving problems.

Level 7

Pupils understand and apply Pythagoras' theorem when solving problems in two dimensions. They calculate lengths, areas and volumes in plane shapes and right prisms. They enlarge shapes by a fractional scale factor, and appreciate the similarity

of the resulting shapes. They determine the locus of an object moving according to a rule. They appreciate the imprecision of measurement and recognise that a measurement given to the nearest whole number may be inaccurate by up to one half in either direction. They understand and use compound measures, such as speed.

Level 8

Pupils understand and use congruence and mathematical similarity. They use sine, cosine and tangent in right-angled triangles when solving problems in two dimensions.

Exceptional Performance

Pupils sketch the graphs of sine, cosine and tangent functions for any angle, and generate and interpret graphs based on these functions. They use sine, cosine and tangent of angles of any size, and Pythagoras' theorem when solving problems in two and three dimensions. They construct formal geometric proofs. They calculate lengths of circular arcs and areas of sectors, and calculate the surface area of cylinders and volumes of cones and spheres. They appreciate the continuous nature of scales that are used to make measurements.

ATTAINMENT TARGET 4: MA4 STATISTICS

Level 1

Pupils sort objects and classify them, demonstrating the criterion they have used. They collect data to answer questions.

Level 2

Pupils sort objects and classify them using more than one criterion. When they have gathered information to answer a question or explore a situation, pupils record results in simple lists, tables, diagrams and block graphs, in order to communicate their findings.

Level 3

Pupils extract and interpret information presented in simple tables and lists. They construct charts and diagrams to communicate information they have gathered for a purpose, and they interpret information presented to them in this form.

Level 4

Pupils generate and answer questions that require the collection of discrete data which they record using a frequency table. They understand and use an average and range to describe sets of data. Using technology where appropriate: they group data in equal class intervals if necessary, represent collected data in frequency diagrams and interpret such diagrams. They construct and interpret simple line graphs.

Level 5

Pupils understand and use the mean of discrete data. They compare two simple distributions using the range and one of the mode, median or mean. They interpret graphs and diagrams, including pie charts, and draw conclusions. They understand and use the probability scale from 0 to 1. They find and justify probabilities and approximations to these by selecting and using methods based on equally likely outcomes and experimental evidence, as appropriate. They understand that different outcomes may result from repeating an experiment.

Level 6

Pupils collect and record continuous data, choosing appropriate equal class intervals over a sensible range to create frequency tables. They construct and interpret frequency diagrams. They construct pie charts. They draw conclusions from scatter diagrams, and have a basic understanding of correlation. When dealing with a combination of two experiments, they identify all the outcomes. When solving problems, they use their knowledge that the total probability of all the mutually exclusive outcomes of an experiment is 1.

Level 7

Pupils specify hypotheses and test them by designing and using appropriate methods that take account of variability or bias. They determine the modal class and estimate the mean, median and range of sets of grouped data, selecting the statistic most appropriate to their line of enquiry. They use measures of average and range,

with associated frequency polygons, as appropriate, to compare distributions and make inferences. They understand relative frequency as an estimate of probability and use this to compare outcomes of experiments.

Level 8

Pupils interpret and construct cumulative frequency tables and diagrams. They estimate the median and interquartile range and use these to compare distributions and make inferences. They understand how to calculate the probability of a compound event and use this in solving problems.

Exceptional Performance

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

LEVEL DESCRIPTIONS: MODERN FOREIGN LANGUAGES

ATTAINMENT TARGET 1: LISTENING AND RESPONDING

Level 1

Pupils show that they understand a few familiar spoken words and phrases. They understand speech spoken clearly, face to face or from a good-quality recording. They may need a lot of help, such as repetition or gesture.

Level 2

Pupils show that they understand a range of familiar spoken phrases. They respond to a clear model of standard language, but may need items to be repeated.

Level 3

Pupils show that they understand the main points from short spoken passages made up of familiar language. They identify and note personal responses. They may need short sections to be repeated.

Level 4

Pupils show that they understand the main points and some of the detail from spoken passages made up of familiar language in simple sentences. They may need some items to be repeated.

Level 5

Pupils show that they understand the main points and opinions in spoken passages made up of familiar material from various contexts, including present and past or future events. They may need some repetition.

Level 6

Pupils show that they understand the difference between present, past and future events in a range of spoken material that includes familiar language in less familiar contexts. They identify and note the main points and specific details. They need little repetition.

Level 7

Pupils show that they understand longer passages and recognise people's points of view. The passages cover a range of material that contains some complex sentences and unfamiliar language. They understand language spoken at near normal speed, and need little repetition.

Level 8

Pupils show that they understand passages including some unfamiliar material and recognise attitudes and emotions. These passages include different types of spoken

material from a range of sources. When listening to familiar and less familiar material, they draw inferences, and need little repetition.

Exceptional Performance

Pupils show that they understand the gist of a range of authentic passages in familiar contexts. These passages cover a range of factual and imaginative speech, some of which expresses different points of view, issues and concerns. They summarise, report, and explain extracts, orally or in writing.

ATTAINMENT TARGET 2: SPEAKING

Level 1

Pupils say single words and short, simple phrases in response to what they see and hear. They may need considerable support from a spoken model and from visual clues. They imitate correct pronunciation with some success.

Level 2

Pupils answer simple questions and give basic information. They give short, simple responses to what they see and hear, and use set phrases. Their pronunciation shows an awareness of sound patterns and their meaning is clear.

Level 3

Pupils ask and answer simple questions and talk about their interests. They take part in brief prepared tasks, using visual or other clues to help them initiate and respond. They use short phrases to express personal responses. Although they use mainly memorised language, they occasionally substitute items of vocabulary to vary questions or statements.

Level 4

Pupils take part in simple conversations, supported by visual or other cues, and express their opinions. They begin to use their knowledge of grammar to adapt and substitute single words and phrases. Their pronunciation is generally accurate and they show some consistency in their intonation.

Level 5

Pupils give a short prepared talk that includes expressing their opinions. They take part in short conversations, seeking and conveying information, opinions and reasons in simple terms. They refer to recent experiences or future plans, as well as everyday activities and interests. They vary their language and sometimes produce more extended responses. Although there may be some mistakes, pupils make themselves understood with little or no difficulty.

Level 6

Pupils give a short prepared talk, expressing opinions and answering simple questions about it. They take part in conversations, using a variety of structures and producing more detailed or extended responses. They apply their knowledge of grammar in new contexts. Although they may be hesitant at times, pupils make themselves understood with little or no difficulty and with increasing confidence.

Level 7

Pupils answer unprepared questions. They initiate and develop conversations and discuss matters of personal or topical interest. They improvise and paraphrase. Their pronunciation and intonation are good, and their language is usually accurate.

Level 8

Pupils narrate events, tell a story or relate the plot of a book or film and give their opinions. They justify their opinions and discuss facts, ideas and experiences. They

use a range of vocabulary, structures and time references. They adapt language to deal with unprepared situations. They speak confidently, with good pronunciation and intonation. Their language is largely accurate, with few mistakes of any significance.

Exceptional Performance

Pupils take part in discussions covering a range of factual and imaginative topics. They give, justify and seek personal opinions and ideas in informal and formal situations. They deal confidently with unpredictable elements in conversations, or with people who are unfamiliar. They speak fluently, with consistently accurate pronunciation, and can vary intonation. They give clear messages and make few errors.

ATTAINMENT TARGET 3: READING AND RESPONDING

Level 1

Pupils recognise and read out a few familiar words and phrases presented in clear script in a familiar context. They may need visual clues.

Level 2

Pupils show that they understand familiar written phrases. They match sound to print by reading aloud familiar words and phrases. They use books or glossaries to find out the meanings of new words.

Level 3

Pupils show that they understand the main points and personal responses in short written texts in clear printed script made up of familiar language in simple sentences. They are beginning to read independently, selecting simple texts and using a bilingual dictionary or glossary to look up new words.

Level 4

Pupils show that they understand the main points and some of the detail in short written texts from familiar contexts. When reading on their own, as well as using a bilingual dictionary or glossary, they begin to use context to work out the meaning of unfamiliar words.

Level 5

Pupils show that they understand the main points and opinions in written texts from various contexts, including present, past or future events. Their independent reading includes authentic materials. They are generally confident in reading aloud, and in using reference materials.

Level 6

Pupils show that they understand the difference between present, past and future events in a range of texts that include familiar language in less familiar contexts. They identify and note the main points and specific details. They scan written material for stories or articles of interest and choose books or texts to read independently, at their own level. They are more confident in using context and their knowledge of grammar to work out the meaning of unfamiliar language.

Level 7

Pupils show that they understand longer texts and recognise people's points of view. These texts cover a range of imaginative and factual material that contains some complex sentences and unfamiliar language. Pupils use new vocabulary and structures found in their reading to respond in speech or writing. They use reference materials when these are helpful.

Level 8

Pupils show that they understand texts including some unfamiliar material and recognise attitudes and emotions. These texts cover a wide variety of types of written

material, including unfamiliar topics and more complex language. When reading for personal interest and for information, pupils consult a range of reference sources where appropriate.

Exceptional Performance

Pupils show that they understand a wide range of authentic texts in familiar contexts. These texts include factual and imaginative material, some of which express different points of view, issues and concerns, and which include official and formal texts. Pupils summarise, report, and explain extracts, orally or in writing. They develop their independent reading by choosing and responding to stories, articles, books and plays, according to their interests.

ATTAINMENT TARGET 4: WRITING

Level 1

Pupils write or copy simple words or symbols correctly. They label items and select appropriate words to complete short phrases or sentences.

Level 2

Pupils write one or two short sentences, following a model, and fill in the words on a simple form. They label items and write familiar short phrases correctly. When they write familiar words from memory, their spelling may be approximate.

Level 3

Pupils write a few short sentences, with support, using expressions that they have already learnt. They express personal responses. They write short phrases from memory and their spelling is readily understandable.

Level 4

Pupils write short texts on familiar topics, adapting language that they have already learnt. They draw largely on memorised language. They begin to use their knowledge of grammar to adapt and substitute individual words and set phrases. They begin to use dictionaries or glossaries to check words they have learnt.

Level 5

Pupils write short texts on a range of familiar topics, using simple sentences. They refer to recent experiences or future plans, as well as to everyday activities. Although there may be some mistakes, the meaning can be understood with little or no difficulty. They use dictionaries or glossaries to check words they have learnt and to look up unknown words.

Level 6

Pupils write texts giving and seeking information and opinions. They use descriptive language and a variety of structures. They apply grammar in new contexts. Although there may be a few mistakes, the meaning is usually clear.

Level 7

Pupils write articles or stories of varying lengths, conveying opinions and points of view. They write about real and imaginary subjects and use an appropriate register. They link sentences and paragraphs, structure ideas and adapt previously learnt language for their own purposes. They edit and redraft their work, using reference sources to improve their accuracy, precision and variety of expression.

Level 8

Pupils produce formal and informal texts in an appropriate style on familiar topics. They express and justify ideas, opinions or personal points of view and seek the views of others. They develop the content of what they have read, seen or heard. Their spelling and grammar are generally accurate. They use reference materials to extend their range of language and improve their accuracy.

Exceptional Performance

Pupils communicate ideas accurately and in an appropriate style over a range of familiar topics, both factual and imaginative. They write coherently and accurately.

LEVEL DESCRIPTIONS: MUSIC

Level 1

Pupils recognise and explore how sounds can be made and changed. They use their voices in different ways such as speaking, singing and chanting, and perform with awareness of others. They repeat short rhythmic and melodic patterns and create and choose sounds in response to given starting points. They respond to different moods in music and recognise well-defined changes in sounds, identify repeated patterns and take account of musical instructions.

Level 2

Pupils recognise and explore how sounds can be organised. They sing with a sense of the shape of the melody, and perform simple patterns and accompaniments keeping to a steady pulse. They choose carefully and order sounds within simple structures such as beginning, middle, end, and in response to given starting points. They represent sounds with symbols and recognise how the musical elements can be used to create different moods and effects and communicate ideas. They improve their own work.

Level 3

Pupils recognise and explore the ways sounds can be combined and used expressively. They sing in tune with expression and perform simple melodic and rhythmic parts. They improvise repeated patterns and combine several layers of sound with an awareness of the combined effect. They recognise how the different musical elements are combined and used expressively and make improvements to their own work, commenting on the intended effect.

Level 4

Pupils identify and explore the relationship between sounds and how music reflects different intentions. While performing by ear and from notations, they maintain their own part with awareness of how the different parts fit together and the need to achieve an overall effect. They improvise melodic and rhythmic phrases as part of a group performance and compose by developing ideas within musical structures. They describe, compare and evaluate different kinds of music using an appropriate musical vocabulary. They suggest improvements to their own and others' work, commenting on how intentions have been achieved.

Level 5

Pupils identify and explore musical devices and how music reflects time, place and culture. They perform significant parts from memory and from notations, with awareness of their own contribution such as leading others, taking a solo part or providing rhythmic support. They improvise melodic and rhythmic material within given structures, use a variety of notations, and compose music for different occasions using appropriate musical devices. They analyse and compare musical features. They evaluate how venue, occasion and purpose affect the way music is created, performed and heard. They refine and improve their work.

Level 6

Pupils identify and explore the different processes and contexts of selected musical styles, genres and traditions. They select and make expressive use of tempo, dynamics, phrasing and timbre. They make subtle adjustments to fit their own part within a group performance. They improvise and compose in different styles and genres, using harmonic and non-harmonic devices where relevant, sustaining and developing musical ideas, and achieving different intended effects. They use relevant notations to plan, revise and refine material. They analyse, compare and evaluate how music reflects the contexts in which it is created, performed and heard. They make improvements to their own and others' work in the light of the chosen style.

Level 7

Pupils discriminate between and explore musical conventions in, and influences on, selected styles, genres and traditions. They perform in different styles, making significant contributions to the ensemble and using relevant notations. They create coherent compositions drawing on internalised sounds. They adapt, improvise, develop, extend and discard musical ideas within given and chosen musical structures, styles, genres and traditions. They evaluate, and make critical judgements about, the use of musical conventions and other characteristics and how different contexts are reflected in their own and others' work.

Level 8

Pupils discriminate between and exploit the characteristics and expressive potential of selected musical resources, styles, genres and traditions. They perform, improvise and compose extended compositions with a sense of direction and shape, both within melodic and rhythmic phrases and overall form. They explore different styles, genres and traditions, working by ear and by making accurate use of appropriate notations. They both follow and challenge conventions. They discriminate between musical styles, genres and traditions, commenting on the relationship between the music and its cultural context, and making and justifying their own judgements.

Exceptional Performance

Pupils discriminate between and develop different interpretations. They express their own ideas and feelings in a developing personal style, exploiting instrumental and/or vocal possibilities. They give convincing performances and demonstrate empathy with other performers. They produce compositions that demonstrate a coherent development of musical ideas, consistency of style and a degree of individuality. They discriminate and comment on how and why changes occur within selected traditions, including the particular contribution of significant performers and composers.

LEVEL DESCRIPTIONS: PHYSICAL EDUCATION

Level 1

Pupils copy, repeat and explore simple skills and actions with basic control and coordination. They start to link these in ways that suit the activities. They describe and comment on their own and others' actions. They talk about how to take part in physical activity safely, and how their bodies feel during an activity. They work with others in practices and suggest some simple ideas on how to make changes.

Level 2

Pupils explore simple skills. They copy, remember, repeat and explore simple actions with control and coordination. They vary skills, actions and ideas and their deployment and link them in ways that suit the activities. They begin to show some understanding of simple tactics and basic compositional ideas. They talk about differences between their own and others' performance and suggest improvements. They understand how to take part in physical activity safely, and describe how their bodies feel during different activities. They work with others, devising simple ideas for practices and rules.

Level 3

Pupils select and use skills, actions and ideas appropriately, applying them with control and coordination. They show that they understand tactics and composition by starting to vary how they respond. They can see how their work is similar to and different from others' work, and use this understanding to improve their own performance. They give reasons why warming up before an activity is important, and why physical activity is good for their health. They are able to take the lead in pairs and small groups when carrying out practices or deciding upon their own games, challenges, tactics and sequences.

Level 4

Pupils link skills, techniques and ideas and apply them accurately and appropriately. When performing, they show precision, control and fluency. They show that they understand tactics and composition. They compare and comment on skills, techniques and ideas used in their own and others' work, and use this understanding to improve their performance. They explain and apply basic safety principles when preparing for exercise. They describe how exercise affects their bodies, and why regular, safe activity is good for their health and wellbeing. They work with others to plan and lead simple practices and activities for themselves and others.

Level 5

Pupils select and combine skills, techniques and ideas and apply them accurately and appropriately in different physical activities, When performing in different physical activities, they consistently show precision, control and fluency. They show that they can draw on what they know about strategy, tactics and composition to produce effective outcomes. They modify and refine skills and techniques to improve their performance and adapt their actions in response to changing circumstances. They analyse and comment on skills, techniques and ideas and how these are applied in their own and others' work. They explain how the body reacts during different types of activity, and why physical activity is an essential component of a healthy lifestyle.

They plan, organise and lead practices and activities safely, helping others' to improve their performance.

Level 6

Pupils select and combine skills, techniques and ideas and use them in a widening range of familiar and unfamiliar physical activities and contexts, performing with consistent precision, control and fluency. They use imaginative ways to solve problems, overcome challenges and entertain audiences. When planning their own and others' work, and carrying out their own work, they draw on what they know about strategy, tactics and composition in response to changing circumstances, and what they know about their own and others' strengths and weaknesses. They analyse and comment on how skills, techniques and ideas have been used in their own and others' work, and on compositional and other aspects of performance. They suggest ways to improve. They understand how the different components of fitness affect performance and explain how different types of exercise contribute to their fitness and health. They describe their involvement in regular, safe physical activity for the benefit of their health and wellbeing. When leading practices and activities, they apply basic rules, conventions and/or compositional ideas consistently.

Level 7

Pupils select and combine advanced skills, techniques and ideas, adapting them accurately and appropriately to meet the demands of increasingly complex situations. They consistently show precision, control, fluency and originality. They apply the principles of advanced strategies, tactics and compositional ideas in their own and others' work, and modify them in response to changing circumstances and other performers. They analyse and comment on their own and others' work as individuals and team members, showing that they understand how skills, tactics, composition and fitness relate to the quality of the performance. They plan ways to improve their own and others' performance and act on these decisions in order to bring about the improvements. They explain the principles of practice and training, and apply them effectively. They explain the benefits of regular, safe and planned physical activity on physical, mental and social wellbeing, and carry out their own physical activity programmes based on their choices and preferences of activities and roles within activities. They take on different roles within an activity, showing an ability to organise and communicate effectively, and applying rules fairly and consistently or adhering to the conventions and codes of conduct for activities.

Level 8

Pupils consistently distinguish between and apply advanced skills, techniques and ideas, always showing high standards of precision, control, fluency and originality. Drawing on what they know of the principles of advanced strategies, tactics or composition, they apply them with proficiency, flair and originality in their own and others' work. When adapting and responding to changing circumstances and other performers, they maintain the quality of a performance. They critically evaluate their own and others' work, showing that they understand the impact of skills, strategy, tactics or composition and fitness on the quality and effectiveness of performance. They use this information to plan and monitor ways in which their own and others' performance could be improved, acting on these decisions to bring about the improvements. They use their knowledge of health, fitness and social wellbeing to plan and evaluate their own and others' exercise and physical activity programmes. They take on different roles within an activity and plan pathways into performance, leadership or officiating based on their choices and preferences.

Exceptional Performance

Pupils consistently use advanced skills, techniques and ideas with precision, control, fluency and originality. Drawing on what they know of the principles of advanced strategies, tactics or composition, they consistently apply these principles with originality, proficiency and flair in their own and others' work. They are increasingly independent in finding imaginative, novel and different solutions to problems posed by themselves and others. They critically analyse and judge their own and others' work, showing that they understand how skills, strategy, tactics or composition and fitness relate to and affect the quality and originality of performance in different physical activities. They reach judgements independently about how their own and others' performance could be improved, prioritising aspects for further development. They consistently apply appropriate knowledge and understanding of health and fitness in all aspects of their work. They understand the contribution physical activity makes to their physical, mental and social wellbeing and participate regularly in physical activity both in and out of school for the benefit of their health and wellbeing.

LEVEL DESCRIPTIONS: RELIGIOUS EDUCATION

ATTAINMENT TARGET 1: LEARNING ABOUT RELIGION AND BELIEF

Level 1

Pupils use some religious words and phrases to recognise and name features of religious life and practice. They can recall religious stories and recognise symbols, and other verbal and visual forms of religious expression.

Level 2

Pupils use religious words and phrases to identify some features of religion and its importance for some people. They begin to show awareness of similarities in religions. Pupils retell religious stories and suggest meanings for religious actions and symbols. They identify how religion is expressed in different ways.

Level 3

Pupils use a developing religious vocabulary to describe some key features of religions, recognising similarities and differences. They make links between beliefs and sources, including religious stories and sacred texts. They begin to identify the impact religion has on believers' lives. They describe some forms of religious expression.

Level 4

Pupils use a developing religious vocabulary to describe and show understanding of sources, practices, beliefs, ideas, feelings and experiences. They make links between them, and describe some similarities and differences both within and between religions. They describe the impact of religion on people's lives. They suggest meanings for a range of forms of religious expression.

Level 5

Pupils use an increasingly wide religious vocabulary to explain the impact of beliefs on individuals and communities. They describe why people belong to religions. They understand that similarities and differences illustrate distinctive beliefs within and between religions and suggest possible reasons for this. They explain how religious sources are used to provide answers to ultimate questions and ethical issues, recognising diversity in forms of religious, spiritual and moral expression, within and between religions.

Level 6

Pupils use religious and philosophical vocabulary to give informed accounts of religions and beliefs, explaining the reasons for diversity within and between them. They explain why the impact of religions and beliefs on individuals, communities and societies varies. They interpret sources and arguments, explaining the reasons that are used in different ways by different traditions to provide answers to ultimate questions and ethical issues. They interpret the significance of different forms of religious, spiritual and moral expression.

Level 7

Pupils use a wide religious and philosophical vocabulary to show a coherent understanding of a range of religions and beliefs. They analyse issues, values and questions of meaning and truth. They account for the influence of history and culture on aspects of religious life and practice. They explain why the consequences of belonging to a faith are not the same for all people within the same religion or tradition. They use some of the principal methods by which religion, spirituality and ethics are studied, including the use of a variety of sources, evidence and forms of expression.

Level 8

Pupils use a comprehensive religious and philosophical vocabulary to analyse a range of religions and beliefs. They contextualise interpretations of religion with reference to historical, cultural, social and philosophical ideas. They critically evaluate the impact of religions and beliefs on differing communities and societies. They analyse differing interpretations of religious, spiritual and moral sources, using some of the principal methods by which religion, spirituality and ethics are studied. They interpret and evaluate varied forms of religious, spiritual and moral expression.

Exceptional Performance

Pupils use a complex religious, moral and philosophical vocabulary to provide a consistent and detailed analysis of religions and beliefs. They evaluate in depth the importance of religious diversity in a pluralistic society. They clearly recognise the extent to which the impact of religion and beliefs on different communities and societies has changed over time. They provide a detailed analysis of how religious, spiritual and moral sources are interpreted in different ways, evaluating the principal methods by which religion and spirituality are studied. They synthesise effectively their accounts of the varied forms of religious, spiritual and moral expression.

ATTAINMENT TARGET 2: LEARNING FROM RELIGION AND BELIEF

Level 1

Pupils talk about their own experiences and feelings, what they find interesting or puzzling and what is of value and concern to themselves and to others.

Level 2

Pupils ask, and respond sensitively to, questions about their own and others' experiences and feelings. They recognise that some questions cause people to wonder and are difficult to answer. In relation to matters of right and wrong, they recognise their own values and those of others.

Level 3

Pupils identify what influences them, making links between aspects of their own and others' experiences. They ask important questions about religion and beliefs, making links between their own and others' responses. They make links between values and commitments, and their own attitudes and behaviour.

Level 4

Pupils raise, and suggest answers to, questions of identity, belonging, meaning, purpose, truth, values and commitments. They apply their ideas to their own and other people's lives. They describe what inspires and influences themselves and others.

Level 5

Pupils ask, and suggest answers to, questions of identity, belonging, meaning, purpose and truth, values and commitments, relating them to their own and others' lives. They explain what inspires and influences them, expressing their own and others' views on the challenges of belonging to a religion.

Level 6

Pupils use reasoning and examples to express insights into the relationship between beliefs, teachings and world issues. They express insights into their own and others' views on questions of identity and belonging, meaning, purpose and truth. They consider the challenges of belonging to a religion in the contemporary world, focusing on values and commitments.

Level 7

Pupils articulate personal and critical responses to questions of meaning, purpose and truth and ethical issues. They evaluate the significance of religious and other views for understanding questions of human relationships, belonging, identity, society, values and commitments, using appropriate evidence and examples.

Level 8

Pupils coherently analyse a wide range of viewpoints on questions of identity, belonging, meaning, purpose, truth, values and commitments. They synthesise a range of evidence, arguments, reflections and examples, fully justifying their own views and ideas and providing a detailed evaluation of the perspectives of others.

Exceptional Performance

Pupils analyse in depth a wide range of perspectives on questions of identity and belonging, meaning, purpose and truth, and values and commitments. They give independent, well-informed and highly reasoned insights into their own and others' perspectives on religious and spiritual issues, providing well-substantiated and balanced conclusions.

LEVEL DESCRIPTIONS: SCIENCE

ATTAINMENT TARGET 1: HOW SCIENCE WORKS

Level 1

Pupils respond to prompts to suggest practical ways to find answers to questions. They make observations about features of objects, living things and events. They communicate their findings in ways such as talking about their work in everyday terms, or through drawings or by completing pictograms.

Level 2

Pupils respond to suggestions and make their own suggestions, with help, about how to collect relevant data and answer questions. They find information by using texts, with help. They follow direct instructions in order to stay safe. They make observations and measurements to compare living things, objects and events, using equipment provided for them. They record findings using prepared tables and communicate observations using scientific vocabulary. They say whether what happened was what they expected and, when prompted, suggest different ways they could have done things.

Level 3

Pupils respond to suggestions and put forward their own ideas about how to investigate an idea or find answers to questions. They recognise why it is important to collect data to investigate ideas and answer questions, and use texts to find information. They begin to recognise risks with help. They make relevant observations and measure quantities, such as length or mass, selecting and using a range of simple equipment. They carry out fair tests with some help, recognising and explaining what makes them fair. They record findings in a variety of ways, including tables or charts. They give explanations for observations and for patterns in measurements they have made and recorded. They communicate in a scientific way what they have found out and suggest improvements in their work.

Level 4

Pupils decide on an appropriate approach, including using a fair test to answer a question, and select suitable equipment and information from that provided. They select and use methods that are adequate for the task. Following instructions, they take action to control obvious risks to themselves. They make a series of observations and measurements and vary one factor while keeping others the same. They record their observations, comparisons and measurements using tables and bar charts and begin to plot points to form simple graphs. They interpret data containing positive and negative numbers. They begin to relate their conclusions to patterns in data, including graphs, and to scientific knowledge and understanding. They communicate their conclusions using appropriate scientific language. They suggest improvements in their work, giving reasons.

Level 5

Pupils decide appropriate approaches to a range of tasks, including selecting sources of information and apparatus. They select and use methods to obtain data

systematically. They recognise hazard symbols and make, and act on, simple suggestions to control obvious risks to themselves and others. They use line graphs to present data, interpret numerical data and draw conclusions from them. They analyse findings to draw scientific conclusions that are consistent with the evidence. They communicate these using scientific and mathematical conventions and terminology. They evaluate their working methods to make practical suggestions for improvements.

Level 6

Pupils identify an appropriate approach in investigatory work, selecting and using sources of information, scientific knowledge and understanding. They select and use methods to collect adequate data for the task, measuring with precision, using instruments with fine scale divisions, and identify the need to repeat measurements and observations. They recognise a range of familiar risks and take action to control them. They record data and features effectively, choosing scales for graphs and diagrams. They analyse findings to draw conclusions that are consistent with the evidence and use scientific knowledge and understanding to explain them and account for any inconsistencies in the evidence. They manipulate numerical data to make valid comparisons and draw valid conclusions. They communicate qualitative and quantitative data effectively, using scientific conventions and terminology. They evaluate evidence, making reasoned suggestions about how their working methods could be improved.

Level 7

Pupils plan appropriate approaches and procedures, by synthesising information from a range of sources and identifying key factors in complex contexts and in which variables cannot readily be controlled. They select and use methods to obtain reliable data, including making systematic observations and measurements with precision, using a range of apparatus. They recognise the need for a risk assessment and consult appropriate sources of information, which they follow. They record data in graphs, using lines of best fit. They analyse findings to draw conclusions that are consistent with the evidence and use scientific knowledge and understanding to explain these conclusions and identify possible limitations in primary and secondary data. They use quantitative relationships between variables. They communicate effectively, using a wide range of scientific and technical conventions and terminology, including symbols and flow diagrams. They begin to consider whether the data they have collected are sufficient for the conclusions they have drawn.

Level 8

Pupils recognise that different strategies are required to investigate different kinds of scientific questions, and use scientific knowledge and understanding to select an appropriate strategy. In consultation with their teacher they adapt their approach to practical work to control risk. They record data that are relevant and sufficiently detailed, and choose methods that will obtain these data with the precision and reliability needed. They analyse data and begin to explain, and allow for, anomalies. They carry out multi-step calculations and use compound measures, such as speed, appropriately. They communicate findings and arguments, showing awareness of a range of views. They evaluate evidence critically and suggest how inadequacies can be remedied.

Exceptional Performance

Pupils recognise that different approaches are required to investigate different kinds of scientific questions, and use scientific knowledge and understanding to select appropriate strategies. They readily identify hazards, seek appropriate risk assessment information and advice, select that which is relevant and, in consultation with their teacher, adjust practice as required. They make records of relevant observations and comparisons, clearly identifying points of particular significance. They decide the level of precision needed for measurements and collect data that satisfy these requirements. They analyse findings to interpret trends and patterns and draw conclusions from their evidence. They make effective use of a range of quantitative relationships between variables in calculations or when using data to support evidence. They communicate findings and arguments, showing their awareness of the degree of uncertainty and a range of alternative views. They evaluate evidence critically and give reasoned accounts of how they could collect additional evidence.

ATTAINMENT TARGET 2: ORGANISMS, THEIR BEHAVIOUR AND THE ENVIRONMENT

Level 1

Pupils use their knowledge related to organisms, their behaviour and the environment to recognise, identify and describe a range of common plants, animals and natural events. They name and describe external parts or features of plants, such as leaf colour; humans, such as head, arm; and other animals, such as coat colour. They use evidence that to identify plants or animals and make links between science and everyday objects and experiences.

Level 2

Pupils use their knowledge related to organisms, their behaviour and the environment to describe plants and animals, the places they are found and the basic conditions they need in order to survive. They recognise and describe similarities and differences between the plants, humans and other animals they observe, using these to sort them into groups. They use questions based on their own ideas and evidence such as finding different types of plants and animals in different places. They identify science in everyday contexts and say whether it is helpful for example ways of growing vegetables for food.

Level 3

Pupils use knowledge and understanding of organisms, their behaviour and the environment, such as the basic life processes of growth and reproduction, to describe similarities, differences and changes in the plants, animals, and non-living things they observe. They use simple scientific ideas with evidence they have collected to give explanations of their observations, linking cause and effect, for example lack of light or water affecting plant growth and the ways in which animals or plants are suited to their environments. They recognise and explain the purpose of a variety of scientific and technological developments in their everyday lives, for example medicines helping people get better when they are ill.

Level 4

Pupils describe some processes and phenomena related to organisms, their behaviour and the environment, drawing on scientific knowledge and understanding and using appropriate terminology, for example using food chains to describe feeding relationships between plants and animals in a habitat. They recognise that evidence can support or refute scientific ideas, such as in the identification and grouping of living things. They recognise some applications and implications of science, such as the use of predators to control pest populations.

Level 5

Pupils describe processes and phenomena related to organisms, their behaviour and the environment, drawing on abstract ideas and using appropriate terminology, for example the main functions of plant and animal organs and how these functions are essential. They explain processes and phenomena, in more than one step or using a model, such as the main stages of the life cycles of humans and flowering plants. They apply and use knowledge and understanding in familiar contexts, such as different organisms being found in different habitats because of differences in environmental factors. They recognise that both evidence and creative thinking

contribute to the development of scientific ideas, such as the classification of living things. They describe applications and implications of science, such as solving some of the health problems that arise when organ damage occurs.

Level 6

Pupils describe processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology, for example simple cell structure and function. They take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as environmental factors affecting the distribution of organisms in habitats. They apply and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. They describe some evidence for some accepted scientific ideas, such as the causes of variation between living things. They explain the importance of some applications and implications of science, such as the use of selective breeding.

Level 7

Pupils describe processes and phenomena related to organisms, their behaviour and the environment, using abstract ideas and appropriate terminology, for example simple cell structure and function. They take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as environmental factors affecting the distribution of organisms in habitats. They apply and use knowledge and understanding in unfamiliar contexts, such as a food web in a habitat. They describe some evidence for some accepted scientific ideas, such as the causes of variation between living things. They explain the importance of some applications and implications of science, such as the use of selective breeding.

Level 8

Pupils demonstrate extensive knowledge and understanding related to organisms, their behaviour and the environment. They use and apply this effectively in their descriptions and explanations, identifying links between topics, for example relating cellular structure of organs to their associated life processes. They interpret, evaluate and synthesise data from a range of sources and in a range of contexts, for example environmental data from fieldwork. They show they understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed, for example the short-term and long-term effects of environmental change on ecosystems. They describe and explain the importance of a wide range of applications and implications of science, such as relating photosynthesis and respiration to changes in the atmosphere and growth of crops.

Exceptional Performance

Pupils demonstrate both breadth and depth of knowledge and understanding of organisms, their behaviour and the environment. They apply this effectively in their descriptions and explanations, identifying links and patterns within and between topics, for example linking internal and external cell structures to life processes. They interpret, evaluate and synthesise data, from a range of sources in a range of contexts, and apply their understanding to a wide range of biological systems. They demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence-gathering, for example in the study of global climate change. They describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts, such as addressing problems arising from global climate change.

ATTAINMENT TARGET 3: MATERIALS, THEIR PROPERTIES AND THE EARTH

Level 1

Pupils use their knowledge related to materials, their properties and the Earth, to recognise, and describe some common materials, and their sensory properties, such as the texture and appearance of soils. They communicate their descriptions and observations in terms of these properties. They recognise evidence that has been used to answer a question such as identifying similar materials and make links between science and everyday objects and experiences such as waterproof materials being used to keep things dry.

Level 2

Pupils use their knowledge related to materials, their properties and the Earth to identify a range of common materials and some of their properties. They recognise, and describe similarities and differences between the materials they observe, using these to sort them into groups. They recognise and describe ways in which some materials are changed by heating or cooling or by processes such as bending or stretching.
They suggest answers to questions such as the best material to reflect light based on their own ideas and evidence. They identify science in everyday contexts and say whether it is are helpful, for example ice melting.

Level 3

Pupils use knowledge and understanding of materials, their properties and the Earth to sort materials into groups in a variety of ways, according to their properties. They explain the ways in which some materials are suited to specific purposes such as glass for windows or copper for electrical cables. They classify changes in materials as reversible, such as water freezing, and non-reversible, such as baking of cakes. They use simple scientific ideas with evidence they have collected to give explanations of their observations, linking cause and effect, for example the evaporation of water. They recognise and explain the purpose of a variety of scientific and technological developments in their everyday lives, for example sustainable packaging.

Level 4

Pupils describe some processes and phenomena related to materials, their properties and the Earth, drawing on scientific knowledge and understanding and using appropriate terminology, for example separation methods. They recognise that evidence can support or refute scientific ideas, such as the classification of reactions as reversible and irreversible. They recognise some applications and implications of science, such as the safe use of acids and alkalis.

Level 5

Pupils describe processes and phenomena related to materials, their properties and the Earth, drawing on abstract ideas and using appropriate terminology, for example the weathering of rocks. They explain processes and phenomena, in more than one step or using a model, such as the deposition of sediments and their formation into rocks. They apply and use knowledge and understanding in familiar contexts, such as identifying changes of state. They recognise that both evidence and creative

thinking contribute to the development of scientific ideas, such as basing separation methods for mixtures on physical and chemical properties. They describe applications and implications of science, such as the uses of metals based on their specific properties or the benefits and drawbacks of the use of fossil fuels.

Level 6

Pupils describe processes and phenomena related to materials, their properties and the Earth, using abstract ideas and appropriate terminology, for example the particle model applied to solids, liquids and gases. They take account of a number of factors or use abstract ideas or models in their explanations of processes and phenomena, such as word equations. They apply and use knowledge and understanding in unfamiliar contexts, such as relating changes of state to energy transfers in a range of contexts such as the formation of igneous rocks. They describe some evidence for some accepted scientific ideas, such as the patterns in the reactions of acids with metals and the reactions of a variety of substances with oxygen. They explain the importance of some applications and implications of science, such as the production of new materials with specific desirable properties.

Level 7

Pupils describe a wide range of processes and phenomena related to materials, their properties and the Earth, using abstract ideas and appropriate terminology and sequencing a number of points, for example the rock cycle. They make links between different areas of science in their explanations, such as between the nature and behaviour of materials and their particles. They apply and use more abstract knowledge and understanding, in a range of contexts, such as the particle model of matter, and symbols and formulae for elements and compounds. They explain how evidence supports some accepted scientific ideas, such as the reactivity series of metals. They explain, using abstract ideas where appropriate, the importance of some applications and implications of science, such as the need to consider the availability of resources, and environmental effects, in the production of energy and materials.

Level 8

Pupils demonstrate extensive knowledge and understanding related to materials, their properties and the Earth. They use and apply this effectively in their descriptions and explanations, identifying links between topics, for example relating mode of formation of rocks to their texture and mineral content. They represent common compounds by chemical formulae and use these formulae to form balanced symbol equations for reactions. They interpret, evaluate and synthesise data from a range of sources and in a range of contexts, such as describing chemical reactions, classifying them and suggesting how new substances could be made. They show they understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed. They describe and explain the importance of a wide range of applications and implications of science.

Exceptional Performance

Pupils demonstrate both breadth and depth of knowledge and understanding of materials, their properties and the Earth, for example the different timescales over which rock formation and deformation take place. They apply this effectively in their descriptions and explanations, identifying links and patterns within and between topics, for example relating the properties of materials to the nature of their constituent particles. They interpret, evaluate and synthesise data from a range of

sources in a range of contexts, and apply their understanding to a wide range of chemical systems, such as explaining chemical behaviours that do not fit expected patterns. They demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence-gathering. They describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts.

ATTAINMENT TARGET 4: ENERGY, FORCES AND SPACE

Level 1

Pupils use their knowledge related to energy, forces and space to describe some changes in light, sound or movement, that result from actions, such as those caused by pushing and pulling objects or switching on an electrical circuit. They recognise that light and sound come from a variety of sources, such as the Sun or a musical instrument. They recognise evidence that has been used to answer a question, such as how a musical instrument makes a noise, and make links between science and everyday objects and experiences such as the Sun being a light source.

Level 2

Pupils use their knowledge related to energy, forces and space to recognise, describe and compare a range of properties and effects of light, sound, forces, and electricity, such as the ways in which devices work in different electrical circuits, the brightness or colour of lights, the loudness of sounds or the speed or direction of different objects. They suggest answers to questions such as which sound is loudest based on their own ideas and evidence. They identify science in everyday contexts and say whether it is helpful for example electricity in domestic appliances.

Level 3

Pupils use their knowledge and understanding of energy, forces and space to link cause and effect in their observations of the properties and effects of light, sound, forces, and electricity, such as a bulb failing to light because of a break in an electrical circuit, or a push or pull changing the speed or direction of a moving object. They begin to make generalisations such as sounds getting fainter the further the listener is from the source. They use simple scientific ideas with evidence they have collected to give explanations of their observations, linking cause and effect, for example using a switch to turn off a light bulb in an electrical circuit. They recognise and explain the purpose of a variety of scientific and technological developments in their everyday lives, for example streamlining and air resistance.

Level 4

Pupils describe some processes and phenomena related to energy, forces and space, drawing on scientific knowledge and understanding and using appropriate terminology, for example the observed position of the sun in the sky over the course of a day. They recognise that evidence can support or refute scientific ideas, such as sounds being heard through a variety of materials. They recognise some applications and implications of science, such as the use of electrical components to make electrical devices.

Level 5

Pupils describe processes and phenomena related to energy, forces and space, drawing on abstract ideas and using appropriate terminology, for example 'balanced forces'. They explain processes and phenomena, in more than one step or using a model, such as the length of a day or a year. They apply and use knowledge and understanding in familiar contexts. They recognise that both evidence and creative thinking contribute to the development of scientific ideas, such as objects being seen when light from them enters the eye. They describe applications and implications of

science, such as the ways sound can be produced and controlled, for example in musical instruments.

Level 6

Pupils describe processes and phenomena related to energy, forces and space, using abstract ideas and appropriate terminology, for example electric current as a way of transferring energy. They take account of a number of factors in their explanations of processes and phenomena, for example in the relative brightness of stars and planets. They also use abstract ideas or models, for example sustainable energy sources and the refraction of light. They apply and use knowledge and understanding in unfamiliar contexts. They describe some evidence for some accepted scientific ideas, such as the transfer of energy by light, sound or electricity, and the refraction and dispersion of light. They explain the importance of some applications and implications of science, such as the responsible use of unsustainable sources of energy.

Level 7

Pupils describe a wide range of processes and phenomena related to energy, forces and space, using abstract ideas and appropriate terminology and sequencing a number of points, for example how energy is transferred by radiation or by conduction. They make links between different areas of science in their explanations, such as between electricity and magnetism. They apply and use more abstract knowledge and understanding in a range of contexts, such as the appearance of objects in different colours of light. They explain how evidence supports some accepted scientific ideas, such as the role of gravitational attraction in determining the motion of bodies in the solar system. They explain, using abstract ideas where appropriate, the importance of some applications and implications of science, such as the uses of electromagnets.

Level 8

Pupils demonstrate extensive knowledge and understanding related to energy, forces and space, for example the passage of sound waves through a medium. They use and apply this effectively in their descriptions and explanations, identifying links between topics. They interpret, evaluate and synthesise data from a range of sources and in a range of contexts. They show they understand the relationship between evidence and scientific ideas, and why scientific ideas may need to be changed, such as the developing understanding of the structure of the solar system. They describe and explain the importance of a wide range of applications and implications of science, such as relating the dissipation of energy during energy transfer to the need to conserve limited energy resources.

Exceptional Performance

Pupils demonstrate both breadth and depth of knowledge and understanding of energy, forces and space. They apply this effectively in their descriptions and explanations, identifying links and patterns within and between topics, for example understanding how models like the particle model are useful in explaining physical phenomena, such as how sweating causes cooling. They interpret, evaluate and synthesise data from a range of sources in a range of contexts and apply their understanding to a wide range of data on energy efficient physical systems. They demonstrate an understanding of how scientific knowledge and understanding changes, building on processes such as questioning, investigating and evidence gathering, for example through the role of artificial satellites and probes in

communications and space exploration. They describe and explain the importance of a wide range of applications and implications of science in familiar and unfamiliar contexts, such as alternative methods of electricity generation.