

Art Curriculum 2014

Purpose of study

Art, craft and design embody some of the highest forms of human creativity. A high-quality art and design education should engage, inspire and challenge pupils, equipping them with the knowledge and skills to experiment, invent and create their own works of art, craft and design. As pupils progress, they should be able to think critically and develop a more rigorous understanding of art and design. They should also know how art and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation.

Aims

The national curriculum for art and design aims to ensure that all pupils:

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design
- know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Year 4 Art Drawing, Painting, 3D and Printing

<p>EXPLORING AND DEVELOPING IDEAS 1a To create sketch books to record their observations and use them to review and revisit ideas. 1b To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay)</p>	<p>INVESTIGATING AND MAKING 2a Investigate and combine visual and tactile qualities and match them to the purpose of their work. 2b Apply and develop use of tools and techniques, including drawing. 2c Design and make images and artefacts that communicate observations, ideas and feelings by using a variety of methods.</p>	<p>EVALUATING 3a Compare methods and ideas used in their own and others' work and say what they think and feel. 3b Adapt work in response to their views and describe how they may develop it further.</p>	<p>KNOWLEDGE AND UNDERSTANDING 4a How visual and tactile elements including colour, pattern, texture, line, tone, shape, form can be combined. 4b How materials and processes can be matched to ideas and intentions. 4c About great artists, architects and designers in history.</p>
--	---	---	---

Emerging (Level 2)	Developing (Level 3)	Consolidating (Level 4)
<p>I explore ideas from my imagination or from real starting points. I use pencils, pastels and charcoal in my drawings. I show patterns and textures in my drawings by adding dots and lines. I show different tones using coloured pencils. I mix primary colours to make secondary colours. I add white to colours to make tints. I add black to colours to make tones. I create collages sometimes in a group and sometimes on my own. I mix paper and other materials with different textures and appearances. I use glue to join fabrics. I use running stitch to join fabrics. I have explored plaiting and understand the basic method. I comment on differences in others' work and I suggest ways of improving my own work. I make a variety of lines of different sizes, thickness and shapes. I know the positions of primary and secondary colours in relation to each other on the colour wheel. I link colours to natural and man-made objects. I use shapes, textures, colours and patterns in my collages. I can say how other artists have used texture, colour, pattern and shape in their work I know how to dip dye to produce fabric of contrasting colours. I have looked at examples of patchwork and then designed and made my own, using glue or stitching.</p>	<p>I explore ideas and collect visual and other information for my work. I use a number of sketches to base my work on. I use a viewfinder to help me in my sketching. I annotate my sketches in my art sketchbook to explain my ideas. I sketch lightly (so I do not need to use a rubber). I mix colours using tints and tones. I use watercolour paint to produce washes for backgrounds and then add detail. I experiment in creating mood and feelings with colour. My cutting skills are precise. My skills now include: Coiling, Overlapping I know the striking effect work in a limited colour palette can have, through experimentation. I can make paper coils and lay them out to create patterns or shapes. I use mosaic. I use montage. I have the basics of cross-stitch and backstitch. I know how to colour fabric and have used this to add pattern. I can make weavings such as 'God's eyes'. I have the basics of quilting, padding and gathering fabric. I comment on similarities and differences between my own and others' work. I use different grades of pencil at different angles to show different tones. I use hatching and cross hatching to show tone and texture in my drawings. I explore comics throughout the 20th and 21st centuries to see how styles are used for effect. I use a number of brush techniques using thin and thick brushes, to produce shapes, textures, patterns and lines. I make notes in my sketchbook of how artists have used paint and paint techniques to produce pattern, colour, texture, tone, shape, space, form and line. I use tessellation and other patterns in my collage. I use my cutting skills to produce repeated patterns. I look at mosaic, montage and collage from other cultures. I know how to colour fabric and have used this to add pattern. I create texture in my textiles work by tying and sewing threads or by pulling threads. I use my textiles skills to create artwork that is matched to an idea or purpose. I am aware of textiles work from other cultures and times.</p>	<p>I explore ideas and collect visual and other information to help me to develop my work. I keep these in my art sketchbook. I select the most suitable drawing materials for the type of drawing I want to produce. I use shading to add interesting effects to my drawings, using different grades of pencil. I explain the ideas behind my images in my art sketchbook. I use a variety of different shaped lines to indicate movement in my drawings. I use shading to show shadows and reflections on 3D shapes. I have studied other artists' drawings and have experimented with some of these styles. I make comments on the ideas, methods and approaches used in my own and others' work, relating these to the context in which their work was made. I adapt and refine my work to reflect the purpose and meaning of the work. I can create colours by mixing to represent images I have observed in the natural and man-made world. I experiment with different colours to create a mood. My paintings use colour and shapes to reflect feelings and moods. I sketch (lightly) before I paint so as to combine lines with colour to produce images that convey a purpose. I experiment with techniques that use contrasting textures, colours or patterns. (rough/smooth, light/dark, plain/patterned) I have experimented with ceramic mosaic techniques to produce a piece of art. My work reflects a purpose, which I write about in my art sketchbook. My collage is based on observational drawings. My collage reflects a real purpose and I write about this in my art sketchbook. My collage combines both visual and tactile qualities. My collage takes inspiration from artists or designers. I have a sound understanding of how to use the techniques of sewing (cross stitch & backstitch) appliqué, embroidery, plaiting, finger knitting. I combine some of the techniques I know to create hangings. My work is based on tapestries, artefacts and hangings throughout history and in other cultures.</p>

DT Curriculum 2014

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Cooking and nutrition

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Aims

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Year 4 – Design and Technology - Food, Mouldable Materials, Electrical and Mechanical Components

Key stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE
<p>1a Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.</p> <p>1b Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p>	<p>2a Select from and use a wider range of tools and equipment to perform practical tasks [e.g. Cutting, shaping, joining and finishing], accurately.</p> <p>2b Select from and use a wider range of materials and components, including constructional materials, textiles and ingredients according to their functional properties and aesthetic qualities.</p> <p>2c Follow safe procedures and safety to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>2d Understand and apply the principles of a healthy and varied diet.</p>	<p>3a Investigate and analyse a range of existing products.</p> <p>3b Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>3c Understand how key events and individuals in design and technology have helped shaped the world.</p> <p>3d Recognise quality depends on how something is made and if it meets its intended use and suggest alternative ways of making a product if the first attempt fails.</p>	<p>4a Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>4b Understand and use mechanical systems in their products [e.g. Gears, pulleys, cams, levers and linkages]</p> <p>4c Understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>4d Apply their understanding of computing to program, monitor and control their products.</p> <p>4e Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p>

Emerging (Level 2)	Developing (Level 3)	Consolidating (Level 4)
<p>I think of ideas and plan what to do next, based on what I know about materials and components.</p> <p>I select the appropriate tools, techniques and materials, explaining my choices.</p> <p>I use models, pictures and words to describe my designs.</p> <p>I recognise what I have done well in my work. I suggest things I could do in the future.</p> <p>I prepare food safely and hygienically and can describe what this means.</p> <p>I describe the properties of the food ingredients: taste, smell, texture, and consistency.</p> <p>I weigh or measure my ingredients accurately.</p> <p>I describe my food product using its properties.</p> <p>I learn how to best store my product for long-life and hygiene.</p> <p>I use accurate measurements in cm.</p> <p>I use scissors precisely when cutting out.</p> <p>I join textiles using glue, staples, tying or a simple stitch.</p> <p>I have made a textile product that has a good finish and can do the job it was made for.</p> <p>I know that textiles have different properties: touch, insulation, texture and waterproof. I select the appropriate textile so that it does the job I want it to.</p> <p>My structures use materials that are strong.</p> <p>I measure and mark out materials with care and use safe ways of cutting it, including using a junior hacksaw.</p> <p>I use a range of joins.</p> <p>I know how to make structures stronger by folding, joining or by shape (columns, triangles).</p>	<p>I generate ideas and recognise that my designs have to meet a range of different needs.</p> <p>I make realistic plans to achieve my aims.</p> <p>I think ahead about the order of my work, choosing appropriate tools, equipment, materials, components and techniques.</p> <p>I clarify my ideas using labelled sketches and models to communicate the details of my designs.</p> <p>I identify where my evaluations have led to improvements in my products.</p> <p>I select ingredients for my food product.</p> <p>I work in a safe and hygienic way.</p> <p>I measure out my ingredients by weight or quantity, using scales where appropriate.</p> <p>My food product is presented to impress the intended user.</p> <p>I describe my food product in terms of taste, texture, flavour and relate this to the intended purpose of the food.</p> <p>My product has been cooked or chilled to change the nature of the raw ingredients.</p> <p>I select the appropriate textile(s) for my product.</p> <p>I use sharp scissors accurately to cut textiles.</p> <p>I know that the texture and other properties of materials affect my choice.</p> <p>My designs improve as I go along.</p> <p>I combine materials to add strength or visual appeal.</p>	<p>I generate ideas by collecting and using information.</p> <p>I take the views of users' into account when designing my products.</p> <p>I produce step-by-step plans.</p> <p>I communicate alternative ideas using words, labelled sketches and models showing that I am aware of the constraints of my design.</p> <p>I reflect on my designs and develop them bearing in mind the way they will be used.</p> <p>I identify what is working well and what can be improved.</p> <p>I measure using mm and then use scoring, and folding to shape materials accurately with a focus on precision.</p> <p>I make cuts (scissors, snips, saw) accurately and reject pieces that are not accurate and improve my technique.</p> <p>I make holes (punch, drill) accurately.</p> <p>My methods of working are precise so that products have a high quality finish.</p> <p>My joins are strong and stable, giving extra strength to my products. Some joins are flexible to allow for dismantling or folding.</p> <p>My textile work incorporates the views of intended users' and for the purpose.</p> <p>I use my art textiles skills such as stitching to help create a product that is sturdy and fit for purpose.</p> <p>My textile products include structural changes, such as plaiting or weaving to create new products such as rope, belts, bracelets etc.</p>

Geography Curriculum 2014

Purpose of study

A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes. As pupils progress, their growing knowledge about the world should help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Geographical knowledge, understanding and skills provide the frameworks and approaches that explain how the Earth's features at different scales are shaped, interconnected and change over time.

Aims

The national curriculum for geography aims to ensure that all pupils:

- develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time
- are competent in the geographical skills needed to:
 - collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes
 - interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)
 - communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Year 4 – Geography

Water and its effects on landscapes i.e. islands (coasts), rainforests (rivers); How settlements differ and change and an issue arising from changing land use i.e. rainforests

Key stage 2

Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.

Locational knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
[e.g. rivers, islands, rainforests, Romans]

Place knowledge

- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America
[e.g. rainforests, rivers, islands]

Human and physical geography

- describe and understand key aspects of:
- physical geography, including: climate zones, biomes and vegetation belts [e.g. rainforests], rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Year 4 – Geography Skills

Emerging (Level 2)	Developing (Level 3)	Consolidating (Level 4)
<p>I ask what is this place like? What and who will I see in this place? Why are these people here and what are they doing? I tell others' the things I like and dislike about a place and give clear reasons that I write in clear sentences. I use words, pictures, bar charts, Venn diagrams, pictograms, and tables to help me describe places.</p> <p>I describe places using geography words such as natural and built (and also see 3a-3e below). I look at places and draw features I like or dislike, sorting them into groups. I take digital photographs of a locality and use them back in the classroom to help describe a place, adding geography words. I can mark on a map of the British Isles, where I live and any other locations I know about. I can mark on a map of the world, The British Isles, my country of birth (if different) and any other locations I have discussed in class. I can mark on a map of the local area, the location of the school and any other features I know about. I use books, stories, and other information to find out about places and I keep this in an organised way. I can make a map of the things I see in the place I am visiting or finding out about. My maps are labelled with geography words I have learned (and may include teacher drawn NWSE compass rose). My maps have grid references (A1, B1 etc). My maps contain a key with symbols or colours to help identify features. I can say what type of buildings are in a place (houses, shops, offices, flats, farm buildings etc) and use this to decide whether a place is a city, town, village, coastal or rural area. I say what places are like using words and phrases such as built up, noisy, busy, quiet, farm land, hills, streets, roads, woods, coastline. I can say where somewhere is using words such as the city or town name, and the region (or continent for studies further afield). I can say why places have become as they are (lots of shops bring lots of people/ farmland is quiet because people don't have much need to go there). I can say how a place is changing (e.g. new houses being built, getting busier as it becomes more popular, in decline as people move elsewhere, not as popular as it once was for leisure activities). I can say how a place is like another place. (This is a busy/built up/ farming/ seaside/countryside place, just like... This is a quiet place but ...is a busy noisy place). I know that paths, roads, air, and sea link places to others. I also know some of the reasons places are linked: holidays, leisure, work, food, and people moving to another country/place. I can name and identify the equator and the tropics.</p> <p>These programmes of study are covered in 3a-e above. I keep a class weather chart throughout the school year and discuss changes. I collect temperature and rainfall information and keep this on a class record sheet throughout the school year. I can suggest solutions to different points of view as to how a locality can be improved.</p>	<p>I ask, "Which PHYSICAL features does this place have?" I ask, "Which HUMAN features does this place have?" I give reasons for why some of those features are where they are. I describe different points of view on an environmental issue affecting a locality.*** I find out about places and the features in those places by either going to that place to observe or by looking at information sources. I use my writing skills to communicate what I know. I use my maths skills to help me record and present my observations. (Charts, graphs, tables, scales etc). I use my ICT skills to help me find out information and present what I have found out.</p> <p>I use the terms PHYSICAL and HUMAN accurately and can describe these features. I am building up a list of geography words (see 'recommended geography words list'). I make detailed sketches of the features of a location. I devise questionnaires to find out local opinions on an issue. I look at maps of areas I am studying and identify features. I draw maps and plans of localities I have studied that include keys, grid references, four figure grid references (e.g.05,15), a scale (e.g. 1 square =1KM), a compass rose indicating North and some standard Ordnance Survey symbols. I use the contents and index pages of an Atlas to find places quickly. I have looked at how a map is a flat representation of a place on the globe. I have used a globe to explore the nature of our world and can point out the North and South poles. I use the internet to help find out about a location, including aerial photographs (e.g. Google Earth). I can plan a route using 8 points of the compass. I can describe a place using information I have found out using my geography words well. I compare places that I have studied using the physical and human features for my comparisons. I give some reasons for the similarities and differences between places, using geographical language. When I describe where a place is I use the 8 points of the compass to describe its position. When I describe where a place is, I use country, region and names of towns, cities, and rivers. I know where the British Isles are and can name The United Kingdom (England, Scotland, Wales & Northern Ireland), and The Republic of Ireland. I can name and locate the capital cities London, Dublin, Edinburgh, Cardiff and Belfast. I can name and identify the Cambrian Mountains, the Grampian Mountains, the Lake District, and the Pennines. I can name and identify the three longest rivers in the UK (Severn, Thames, Trent). I can name and identify the seas around the United Kingdom (The English Channel, the Irish Sea and the North Sea). I can name the significant places and features of a location I am studying (and of my country of birth). I can name and locate France (Paris), Germany (Berlin) Italy (Rome), and Spain (Madrid). I can name and locate the largest mountain range in Europe (The Alps).</p> <p>I can identify the parts of a river and understand how land use is different along the river's course. (Source, meander, mouth) and areas around (flood plains). *OR I can identify the parts of a coastline (river mouth, beach, cliffs, stacks, caves). * I can explain the process of erosion and deposition (at either the coast or in a river).* I know how erosion, deposition and flooding can affect people.* I can identify how a place where people live (settlement) has changed over time and give some reasons for this, giving precise observations or research as evidence for this.** I use both physical and human factors in my explanation. ** I can compare places where people live and give reasons for the differences. **</p> <p>I keep a class weather chart throughout the school year and discuss weather around the world. *** I collect temperature and rainfall information and keep this on a class record sheet throughout the school year. *** I can summarise an environmental issue either in the local area or an area I am studying. *** I can suggest solutions to different points of view as to how a locality can be improved. *** I know how I can contribute to a reduction in climate change. ***</p>	<p>I ask, "Which PHYSICAL and HUMAN features does this place have?" I give reasons why some of those features are where they are. I ask, "What may this place be like in the future?" I collect statistics about people and places / present them in the most appropriate ways. I map land use of a location with given criteria. (e.g. leisure, shopping, residential etc). I describe different points of view on an environmental issue affecting a locality and give my opinion on the issue, giving reasons. I find out about places and the features in those places by either going to that place to observe or by deciding which will be the best sources of information to look at. I choose the most appropriate writing skills to communicate what I know. I choose the most appropriate maths skills to help me record and present my observations. (Charts, graphs, tables, scales etc). I use the terms PHYSICAL and HUMAN accurately and can describe these features. I am confidently using geographical words (see 'recommended geography words list'). I make detailed field sketches of the features of a location, labelling them with appropriate geographical words. My field sketches show layouts, patterns or movement (as appropriate). I make careful measurements of rainfall, temperature, distances, depths (as appropriate) and record these in the most suitable way. (Including use of ICT). I look at and make detailed maps of areas I am studying. I draw maps and plans of localities I have studied that include keys, grid references, four figure grid references (e.g. :05,15), a scale (e.g. 1 square =1KM), a compass rose, indicating North and standard Ordnance Survey symbols. I use the contents and index pages of an Atlas to find places quickly, and use my knowledge of the 7 continents to help me locate places in the contents. I use aerial photographs to match features on a map to the photograph. I use aerial photographs to help describe a location in more detail. I identify buildings and land use by using aerial photographs. I use the internet to help find out about a location (e.g. Google Earth). I can describe a place using information I have found out using my geographical words well. I compare and contrast places that I have studied using the physical and human features for my comparisons, and my knowledge of continents, countries, climate, temperature, and economy. I give some reasons for the similarities and differences between places, using geographical language and what I know about relationships between countries. When I describe where a place is I use the 8 points of the compass to describe its position. When I describe where a place is, I use continent, country, region and names of towns, cities, and rivers. When I describe places, I do so in terms of its economic development as well as other features. I can name and locate all places and features learned previously and: I can name and locate the River Rhine (longest river in Europe). I can name the two largest seas around Europe (the Mediterranean Sea, the North Sea). I can name the significant places and features of a location I am studying (and of my country of birth). I can name and locate the continents (Africa, Asia, Europe, North America, South America, Antarctica) I can name the largest cities in each continent (Lagos, Tokyo, Paris, New York, Sydney, and Sao Paulo). I can name the six countries with the highest populations (Brazil, China, India, Indonesia, Russia, and USA). I keep a class weather chart throughout the school year and discuss changes, relating this to news and opinions about climate change. I collect temperature and rainfall information and keep this on a class record sheet throughout the school year. I can summarise an environmental issue , its possible causes, and solutions either in the local area or an area I am studying. I can suggest more than one solution as to how a locality can be improved. I know how I can contribute to a reduction in climate change.</p>

History Curriculum 2014

Purpose of study

A high-quality history education will help pupils gain a coherent knowledge and understanding of Britain's past and that of the wider world. It should inspire pupils' curiosity to know more about the past. Teaching should equip pupils to ask perceptive questions, think critically, weigh evidence, sift arguments, and develop perspective and judgement. History helps pupils to understand the complexity of people's lives, the process of change, the diversity of societies and relationships between different groups, as well as their own identity and the challenges of their time.

Aims

The national curriculum for history aims to ensure that all pupils:

- know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day: how people's lives have shaped this nation and how Britain has influenced and been influenced by the wider world
- know and understand significant aspects of the history of the wider world: the nature of ancient civilisations; the expansion and dissolution of empires; characteristic features of past non-European societies; achievements and follies of mankind
- gain and deploy a historically grounded understanding of abstract terms such as 'empire', 'civilisation', 'parliament' and 'peasantry'
- understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts, including written narratives and analyses
- understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed
- gain historical perspective by placing their growing knowledge into different contexts, understanding the connections between local, regional, national and international history; between cultural, economic, military, political, religious and social history; and between short- and long-term timescales.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets] or the content indicated as being 'non-statutory'.

Year 4 - History

Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources.

In planning to ensure the progression described above through teaching the British, local and world history outlined below, teachers should combine overview and depth studies to help pupils understand both the long arc of development and the complexity of specific aspects of the content.

Topics

- the Roman Empire and its impact on Britain

- Britain's settlement by Anglo-Saxons and Scots

Examples (non-statutory)

This could include:

- Julius Caesar's attempted invasion in 55-54 BC
- the Roman Empire by AD 42 and the power of its army
- successful invasion by Claudius and conquest, including Hadrian's Wall
- British resistance, for example, Boudica
- 'Romanisation' of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity

Examples (non-statutory)

This could include:

- Roman withdrawal from Britain in c. AD 410 and the fall of the western Roman Empire
- Scots invasions from Ireland to north Britain (now Scotland)
- Anglo-Saxon invasions, settlements and kingdoms: place names and village life
- Anglo-Saxon art and culture
- Christian conversion – Canterbury, Iona and Lindisfarne

Year 4 – History Skills

Emerging (Level 2)	Developing (Level 3)	Consolidating (Level 4)
<p>I understand and use the words past and present when telling others about an event.</p> <p>I can recount changes in my own life over time.</p> <p>I understand how to put people, events and objects in order of when they happened, using a scale the teacher has given me.</p> <p>I use words and phrases such as: recently, when my parents/carers were children, decades, and centuries. I have used information to describe the past.</p> <p>I use information I have found out about the past to describe the differences between then and now.</p> <p>I look at evidence to give and explain reasons why people in the past may have acted in the way they did.</p> <p>I can recount the main events from a significant event in history (giving some interesting details.)</p> <p>I have looked at books and pictures (and: listened to stories, eye witness accounts, pictures, photographs, artefacts, historic buildings, visit to a museum, visit to a gallery, visit to an historical site, used the internet.) See 3a, above</p> <p>I ask, “What was it like for people in the past?” and use information to help me answer the question.</p> <p>I ask, “What happened in the past?” and use information to help me answer the question.</p> <p>I ask, “How long ago did an event happen?” and try to work it out. (Using language such as a little while ago, a very long time ago etc.)</p> <p>I estimate the ages of people (younger, older) by studying and describing their features. I can describe objects, people or events (From the time of)...(significant person or event)</p> <p>I can write my date of birth.</p> <p>I use time lines to order events or objects.</p> <p>I use time lines to place an event or a significant person.</p> <p>I tell stories about the past using my story writing skills.</p> <p>I draw labelled diagrams and write about them to tell others about people, objects or events from the past.</p>	<p>I use a time line to place events I have found out about.</p> <p>I understand that a time line can be divided into BC (Before Christ and AD Anno Domini).</p> <p>I can divide recent history into the present, using 21st Century, and the past using 19th and 20th Centuries.</p> <p>I can name the date of any significant event from the past that I have studied and place it in approximately the right place on a time line.</p> <p>I use words and phrases such as century, decade, before Christ, after, before, during to describe the passing of time. I use evidence to describe the houses and settlements of people in the past.</p> <p>I use evidence to describe the culture and leisure activities from the past.</p> <p>I use evidence to describe the clothes, way of life and actions of people in the past.</p> <p>I use evidence to describe buildings and their uses of people from the past.</p> <p>I use evidence to describe the things people believed in the past (attitudes and religion).</p> <p>I use evidence to describe what was important to people from the past.</p> <p>I use evidence to show how the lives of rich and poor people from the past differed.</p> <p>I use evidence to find out how any of the above may have changed during a time period.</p> <p>I use evidence to give reasons why changes may have occurred.</p> <p>I show on a time line, the changes that I have identified.</p> <p>I can describe some similarities and differences between some people, events and objects (artefacts) I have studied.</p> <p>I can describe how some of the things I have studied from the past affect life today.</p> <p>I have looked at two versions of the same event in history and have identified differences in the accounts.</p> <p>I give reasons why there may be different accounts of history. I use documents, printed sources (e.g. archive materials) the Internet, databases, pictures, photographs, music, artefacts, historic buildings, visits to museums and galleries and visits to sites to collect evidence about the past.</p> <p>I ask, “What was it like for a... (child, rich person, etc) during...”</p> <p>I suggest sources of evidence to help me answer questions. I present my findings about the past using my speaking, writing, maths, ICT, drama and drawing skills.</p> <p>I use dates and terms accurately.</p> <p>I discuss the most appropriate way to present my information, which I realise is for an audience.</p>	<p>I use a time line to place events I have found out about both in this country and abroad.</p> <p>I understand that a time line can be divided into periods: Before Christ (Ancient Civilizations such as Ancient Greeks and Egyptians or Maya etc) AD Romans (AD 43), Anglo-Saxons, Tudors (AD 1485) Stuarts (AD 1603), Georgians (AD 1714), Victorians (AD 1837), Today (AD 1939...).</p> <p>I can describe the main changes in a period of history (using words such as ‘social’, ‘religious’, ‘political’, ‘technological’ and ‘cultural’).</p> <p>I can name the date of any significant event from the past that I have studied and place it in the right place on a time line.</p> <p>I use words and phrases such as era, period, century, decade, Before Christ, AD, after, before, during to describe the passing of time. With help, I choose reliable sources of factual evidence to describe the houses and settlements of people in the past.</p> <p>With help, I choose reliable sources of factual evidence to describe the culture and leisure activities from the past.</p> <p>With help, I choose reliable sources of factual evidence to describe the clothes, way of life and actions of people in the past.</p> <p>With help, I choose reliable sources of factual evidence to describe buildings and their uses of people from the past.</p> <p>With help, I choose reliable sources of factual evidence to describe the things people believed in the past (attitudes and religion).</p> <p>With help, I choose reliable sources of factual evidence to describe what was important to people from the past.</p> <p>With help, I choose reliable sources of factual evidence to show how the lives of rich and poor people from the past differed.</p> <p>With help, I choose reliable sources of factual evidence to find out how any of the above may have changed during a time period.</p> <p>I give my own reasons why changes may have occurred, backed up by evidence I have researched.</p> <p>I show on a time line, the changes that I have identified.</p> <p>I can describe similarities and differences between some people, events and objects (artefacts) I have studied.</p> <p>I can describe how some of the things I have studied from the past affect life today.</p> <p>I have looked at different versions of the same event in history and have identified differences in the accounts.</p> <p>I know that people both now and in the past represent events or ideas in a way that persuades others.</p> <p>I know and understand that it is important to know that some evidence from the past (and present) is propaganda, opinion or misinformation, and that this affects interpretations of history.</p> <p>I give clear reasons why there may be different accounts of history. I use documents, printed sources (eg archive materials) the Internet, databases, pictures, photographs, music, artefacts, historic buildings, visits to museums and galleries and visits to sites to collect evidence about the past.</p> <p>I ask, “What was it like for a... (child, rich person, etc) during...”</p> <p>I choose reliable sources of evidence to help me answer questions, realising that there is often not a single answer to historical questions. I present my findings about the past using my speaking, writing, maths, ICT, drama and drawing skills.</p> <p>I use dates and terms accurately.</p> <p>I choose the most appropriate way to present my information, which I realise is for an audience</p>

ICT Curriculum 2014

Purpose of study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the example content in [square brackets].

Computing – key stages 1 and 2

Subject content

Key stage 1

Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Key stage 2

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

ICT: End of Year Expectations Year 4

	Digital Literacy		Developing Ideas and Making Things Happen		Exchanging and Sharing Information					
	Multimedia		Programming	Handling Data	Technology in our lives	E-Safety				
Key Skills	<ul style="list-style-type: none"> • I can use photos, video and sound to create an atmosphere when presenting to different audiences. • I am confident to explore new media to extend what I can achieve. • I can change the appearance of text to increase its effectiveness. • I can create, modify and present documents for a particular purpose. • I can use a keyboard confidently and make use of a spellchecker to write and review my work. • I can use an appropriate tool to share my work and collaborate online. • I can give constructive feedback to my friends to help them improve their work and refine my own work. 		<ul style="list-style-type: none"> • I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts. • I can use an efficient procedure to simplify a program. • I can use a sensor to detect a change which can select an action within my program. • I know that I need to keep testing my program while I am putting it together. • I can use a variety of tools to create a program. • I can recognise an error in a program and debug it. • I recognise that an algorithm will help me to sequence more complex programs. <p>I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.</p>		<ul style="list-style-type: none"> • I can organise data in different ways. • I can collect data and identify where it could be inaccurate. • I can plan, create and search a database to answer questions. • I can choose the best way to present data to my friends. • I can use a data logger to record and share my readings with my friends. 		<ul style="list-style-type: none"> • I can tell you whether a resource I am using is on the Internet, the school network or my own device. • I can identify key words to use when searching safely on the World Wide Web. • I think about the reliability of information I read on the World Wide Web. • I can tell you how to check who owns photos, text and clipart. • I can create a hyperlink to a resource on the World Wide Web. • I can recognise that websites use different methods to advertise products. 		<ul style="list-style-type: none"> • I choose a secure password and appropriate screen name when I am using a website. • I can talk about the ways I can protect myself and my friends from harm online. • I use the safety features of websites as well as reporting concerns to an adult. • I know that anything I share online can be seen by others. • I choose websites, apps and games that are appropriate for my age. • I can help my friends make good choices about the time they spend online. • I can talk about why I need to ask a trusted adult before downloading files and games from the Internet. • I comment positively and respectfully online and through text messages. 	
Suggested Software	Clicker 6 Espresso Powerpoint/ Publisher Movie maker Word Wordle Photostory Artisan comic maker		Google sketchup Movie Maker Digital Camera Kodu game lab		Scratch MSW LOGO		Data loggers Microsoft Excel Microphones Webcams Digital Camera		Twitter Edmodo Socrative	
Example Activity	<p>We are photographers – Children explore photography and effects using I-pad or digital camera.</p> <p>We are architects – Children plan, design and create their own eco house using Google Sketch up.</p>		<p>We are animators – create a cartoon using scratch.</p>				<p>Children search for specific facts about chosen authors using different keywords to answer a list of pre-designed questions.</p>			

Science Curriculum 2014

Purpose of study

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aims

The national curriculum for science aims to ensure that all pupils:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.

Scientific knowledge and conceptual understanding

The programmes of study describe a sequence of knowledge and concepts. While it is important that pupils make progress, it is also vitally important that they develop secure understanding of each key block of knowledge and concepts in order to progress to the next stage. Insecure, superficial understanding will not allow genuine progression: pupils may struggle at key points of transition (such as between primary and secondary school), build up serious misconceptions, and/or have significant difficulties in understanding higher-order content.

Pupils should be able to describe associated processes and key characteristics in common language, but they should also be familiar with, and use, technical terminology accurately and precisely. They should build up an extended specialist vocabulary. They should also apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data. The social and economic implications of science are important but, generally, they are taught most appropriately within the wider school curriculum: teachers will wish to use different contexts to maximise their pupils' engagement with and motivation to study science.

Science – key stages 1 and 2

The nature, processes and methods of science

'Working scientifically' specifies the understanding of the nature, processes and methods of science for each year group. It should not be taught as a separate strand. The notes and guidance give examples of how 'working scientifically' might be embedded within the content of biology, chemistry and physics, focusing on the key features of scientific enquiry, so that pupils learn to use a variety of approaches to answer relevant scientific questions. These types of scientific enquiry should include: observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources. Pupils should seek answers to questions through collecting, analysing and presenting data. 'Working scientifically' will be developed further at key stages 3 and 4, once pupils have built up sufficient understanding of science to engage meaningfully in more sophisticated discussion of experimental design and control.

Spoken language

The national curriculum for science reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their scientific vocabulary and articulating scientific concepts clearly and precisely. They must be assisted in making their thinking clear, both to themselves and others, and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions.

School curriculum

The programmes of study for science are set out year-by-year for key stages 1 and 2. Schools are, however, only required to teach the relevant programme of study by the end of the key stage. Within each key stage, schools therefore have the flexibility to introduce content earlier or later than set out in the programme of study. In addition, schools can introduce key stage content during an earlier key stage if appropriate. All schools are also required to set out their school curriculum for science on a year-by-year basis and make this information available online.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

Schools are not required by law to teach the content indicated as being 'non-statutory'.

Year 4 - Science

<p style="text-align: center;">Working Scientifically</p> <ul style="list-style-type: none"> • asking relevant questions and using different types of scientific enquiries to answer them • setting up simple practical enquiries, comparative and fair tests • making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • identifying differences, similarities or changes related to simple scientific ideas and processes • using straightforward scientific evidence to answer questions or to support their findings. 	<p style="text-align: center;">Animals Including Humans</p> <ul style="list-style-type: none"> • identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • identify that humans and some other animals have skeletons and muscles for support, protection and movement. • describe the simple functions of the basic parts of the digestive system in humans • identify the different types of teeth in humans and their simple functions • construct and interpret a variety of food chains, identifying producers, predators and prey. 	<p style="text-align: center;">Living Things and their habitats</p> <ul style="list-style-type: none"> • recognise that living things can be grouped in a variety of ways • explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • recognise that environments can change and that this can sometimes pose dangers to living things. 	<p style="text-align: center;">Light</p> <ul style="list-style-type: none"> • recognise that they need light in order to see things and that dark is the absence of light • notice that light is reflected from surfaces • recognise that light from the sun can be dangerous and that there are ways to protect their eyes • recognise that shadows are formed when the light from a light source is blocked by a solid object • find patterns in the way that the size of shadows change. 	<p style="text-align: center;">Forces and Magnets</p> <ul style="list-style-type: none"> • compare how things move on different surfaces • notice that some forces need contact between two objects, but magnetic forces can act at a distance • observe how magnets attract or repel each other and attract some materials and not others • compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials • describe magnets as having two poles • predict whether two magnets will attract or repel each other, depending on which poles are facing. 	<p style="text-align: center;">Earth and Space</p> <ul style="list-style-type: none"> • describe the movement of the Earth, and other planets, relative to the Sun in the solar system • describe the movement of the Moon relative to the Earth • describe the Sun, Earth and Moon as approximately spherical bodies • use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.
<p>Notes and Non-Statutory Guidance Pupils should:</p> <ul style="list-style-type: none"> • Have a range of scientific experiences to enable them to raise their own questions about the world around them. Start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions; recognise when a simple fair test is necessary and help to decide how to set it up; talk about criteria for grouping, sorting and classifying; and use simple keys. • Look for naturally occurring patterns and relationships and decide what data to collect to identify them. They should help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used. • They should learn how to use new equipment, such as data loggers, appropriately. They should collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data. With help, pupils should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions. With support, they should identify new questions arising from the data, making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done. • Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations. Pupils should use relevant scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audiences. • Pupils are not expected to cover each aspect for every area of study. 	<p>Notes and Non-Statutory Guidance Learn about the importance of nutrition/ introduce the main body parts associated with the skeleton and muscles & main body parts associated with the digestive system e.g. mouth, tongue, teeth, oesophagus, stomach and small and large intestine Find out how different parts of the body have special functions. Pupils might work scientifically by: identifying/ grouping animals with/ without skeletons. Observe/ compare their movement; Compare and contrast diets of different animals (e.g. pets)/ decide ways of grouping them according to what they eat. Research different food groups/ design meals Compare the teeth of carnivores/ herbivores, give reasons for differences; finding out what damages teeth and how to look after them. Draw/ discuss ideas about the digestive system and compare with models or images.</p>	<p>Notes and Non-Statutory Guidance Use local environment throughout the year to raise/ answer questions to identify/ study plants/ animals in their habitat. Identify how habitat changes throughout the year. Explore possible ways of grouping a wide selection of living things incl. animals/ flowering/ non-flowering plants. Put vertebrate animals into groups: fish, amphibians, reptiles, birds, and mammals; and invertebrates into snails and slugs, worms, spiders, and insects. Explore positive/ negative examples of human impact on environments e.g. nature reserves, ecologically planned parks, garden ponds, or population growth/development/ litter/ deforestation. Pupils might work scientifically by: use/make simple guide/ keys to explore/ identify local plants/ animals; Make a guide to local living things</p>	<p>Notes and Non-Statutory Guidance Explore what happens when light reflects off a mirror/ other reflective surfaces Play mirror games to help them to answer questions about how light behaves. Learn why it is important to protect their eyes from bright lights. Look for, and measure, shadows, and find out how they are formed and what might cause the shadows to change. Note: Pupils should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses. Pupils might work scientifically by: look for patterns in what happens to shadows when the light source moves or the distance between the light source and the object changes.</p>	<p>Notes and Non-Statutory Guidance Observe that magnetic forces can act without direct contact (most forces - direct contact is necessary). Explore behaviour and everyday uses of different magnets (bar, ring, button, horseshoe). Pupils might work scientifically by: comparing how different things move and grouping them; raising questions/ test to find out how far things move on different surfaces. Explore strengths of different magnets and finding a fair way to compare them Sort materials into those that are magnetic/non-magnetic Look for patterns in way magnets behave in relation to each other and what might affect this, for example, the strength of the magnet or which pole faces another Identify how these properties make magnets useful in everyday items and suggesting creative uses for different magnets</p>	<p>Notes and Non-Statutory Guidance Introduce model of the Sun and Earth to explain day and night. The Sun is a star at centre of our solar system with 8 planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune (Pluto now a 'dwarf planet' since 2006). The moon is a celestial body that orbits a planet (Earth has 1 moon; Jupiter has 4 large/ numerous smaller moons). Note: It is not safe to look directly at the Sun, even wearing dark glasses. Find out about the way that ideas about the solar system have developed e.g. geocentric model gave way to the heliocentric model (Ptolemy, Alhazen, Copernicus) Pupils might work scientifically by: comparing the time of day at different places on the Earth Creating simple models of the solar system/ simple shadow clocks and sundials, calibrated to show midday/ start/ end of the school day; finding out why some people think that structures such as research Stonehenge.</p>

Year 4 Investigative Science Skills

	Emerging (Level 2)	Developing (Level 3)	Consolidating (Level 4)
Planning	I am getting better at telling my friends how I might find something out	This is the equipment/information I need for my investigation	This is the equipment /information I need
Collecting data What are we measuring or observing?	I am practicing to use the equipment given to me to measure things and see (sense) what is happening	I am getting better at choosing which equipment I need.	This is how I am going to use the equipment...
Collecting data What might affect what we are observing or measuring	I am practising to tell my friends what it is I am going to measure or look for With some help from my teachers I am practising to ask questions like; What do you think will happen to if we...?	With help: I am practising to know what to measure or observe What do you think will happen toif we changeand keepthe same? I think X might happen because (everyday knowledge)	I am going to look/listen to X I am going to easureX List up to 3 variables that will effect X. A, B and C will effect X I think because.... (science knowledge)
Gathering evidence	I am getting better at measuring things with help from my teacher and my friends	With help from my friends or teacher I am getting better at saying: This is what I have observed... This is what I have measured ...(Accurate)	This is what I have observed... This is what I have measured ... (Accurate)
Describing what's been found out with a reason	I am getting better at telling my friends what I have found out.	I am practising to say: we found out and we think it happened because	We found out X. The faster the X the slower the Y (er/er rule)
Using evidence to explain	I'm practising to spot surprises I thought this might happen... and the surprise was ... happened. I am practicing to sort things into different groups		We didn't think this would happen This is a spooky result. It might of happened because Identifies evidence and uses it. Our evidence is X and it tell us ...
Communicating scientific ideas	With help I am getting better at showing you what I have found out using a simple tables, drawing, charts	I am practising to show you what I have found out using tables bar charts, drawing, writing	
Suggesting improvements	With help I am getting better at saying: if I was to do it again I might do it like this	I am practising to suggest improvements to our method . If we did this again we would do	Suggest improvements to our method and say why. If we did this again we would do X because ...
Keeping safe		With help I am getting better at telling you if something might not be safe	This could be a risk in my investigation.