



Satellite View - Concepts and Skills - Year 5

Year 5
Geography
Come Fly With Me! America
<p>Concepts</p> <p>NC - Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</p> <p>NC - Locate the world's countries, concentrating on environmental regions, key physical and human characteristics, countries, and major cities</p> <p>A. To be able to locate North and Central America, including some of the different countries and states</p> <p>B. To know about the weather and climate of North and Central America</p> <p>C. To identify the famous landmarks of North America, both physical and human</p>
<p>Skills</p> <p>Ge4.5 Investigate using an increasing range of primary and secondary sources of information</p> <p>Ge4.6 Analyse evidence and draw conclusions</p> <p>Ge4.7 Identify a range of geographical processes that cause change in the physical and human world in different places</p> <p>Ge4.8 Use appropriate geographical vocabulary to communicate in a variety of ways</p> <p>Ge4.9 Use atlases, globes, maps and digital /computer mapping at a range of scales</p>
Cosmopolitan
<p>Concepts</p> <p>NC - Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</p> <p>NC - Locate the world's countries, concentrating on environmental regions, key physical and human characteristics, countries, and major cities</p> <p>A. To be able to locate North America and New York on world maps</p> <p>B. To learn about the topography of New York</p> <p>C. To be able to locate Australia and Sydney on world maps</p> <p>D. To learn about and identify the famous landmarks of Sydney, both physical and human</p>
<p>Skills</p> <p>Ge4.5 Investigate using an increasing range of primary and secondary sources of information</p> <p>Ge4.6 Analyse evidence and draw conclusions</p> <p>Ge4.7 Identify a range of geographical processes that cause change in the physical and human world in different places</p> <p>Ge4.8 Use appropriate geographical vocabulary to communicate in a variety of ways</p> <p>Ge4.9 Use atlases, globes, maps and digital /computer mapping at a range of scales</p>
In Your Element
<p>Concepts</p> <p>NC - To name and locate countries and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts, rivers), and understand how some of these aspects have changed over time</p> <p>NC - Describe and understand key aspects of human geography, including distribution of natural resources including energy, food, minerals and water</p> <p>Earth</p> <p>A. To name and locate the main UK and world mountains</p> <p>B. To learn about different types of rocks, soils and minerals</p> <p>C. To learn about earthquakes</p> <p>Fire</p> <p>D. To name and locate famous volcanoes, studying different types of volcanic material e.g. lava</p> <p>Water</p> <p>E. To learn about tsunamis and their link with earthquakes</p> <p>F. To name and locate the main UK and world rivers and seas</p> <p>G. To learn about the use of water in trade links</p> <p>H. To learn about the distribution of water and water supplies e.g. drought, flooding</p> <p>Air</p>

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<p>I. To learn about climate zones</p> <p>J. To know the difference between a tornado, hurricane and cyclone</p>
<p>Skills</p> <p>Ge43 Ask suitable geographical questions leading to investigation</p> <p>Ge45 Investigate using an increasing range of primary and secondary sources of information</p> <p>Ge46 Analyse evidence and draw conclusions</p> <p>Ge47 Identify a range of geographical processes that cause change in the physical and human world in different places</p> <p>Ge49 Use atlases, globes, maps and digital /computer mapping at a range of scales</p> <p>Ge52 Use appropriate field work techniques and instruments to observe, measure and record human and physical features in the local area</p>
Full Of Beans
<p>Concepts</p> <p>NC - Describe and understand key aspects of human geography, including distribution of natural resources including energy, food, minerals and water</p> <p>A. To learn about different types of beans</p> <p>B. To know how and where in the world beans are grown and how to plan an experiment to grow beans</p> <p>C. To know about different energy sources and where they come from</p> <p>D. To learn more about non-renewable and renewable energy and the advantages and disadvantages of each source</p> <p>E. To learn how to save energy and understand the effect this will have on the environment (local / national / global level)</p>
<p>Skills</p> <p>Ge43 Ask suitable geographical questions leading to investigation</p> <p>Ge44 Investigate ways in which environments can be improved</p> <p>Ge45 Investigate using an increasing range of primary and secondary sources of information</p> <p>Ge46 Analyse evidence and draw conclusions</p> <p>Ge47 Identify a range of geographical processes that cause change in the physical and human world in different places</p> <p>Ge49 Use atlases, globes, maps and digital /computer mapping at a range of scales</p>
Too Hot to Handle
<p>Concepts</p> <p>A. To know the locations of some places on Earth that experience extreme heat and identify the geographical features of these places</p> <p>B. To know how humans have adapted to live in these places and the effect they have on the environment</p> <p>C. To know what is meant by the terms 'global warming' and 'climate change' in the context of melting ice in polar regions and the impact it will have globally</p> <p>D. To compare the locations of Bangladesh in relation to its flooding and Ethiopia in relation to its drought and know some reasons why climate change is exacerbating both extreme conditions</p> <p>E. To learn to save energy and understand the effect this will have on the environment (local/national/global level) and potentially reverse the effects of climate change</p>
<p>Skills</p> <p>Ge43 Ask suitable geographical questions leading to investigation</p> <p>Ge44 Investigate ways in which environments can be improved</p> <p>Ge45 Investigate using an increasing range of primary and secondary sources of information</p> <p>Ge47 Identify a range of geographical processes that cause change in the physical and human world in different places</p> <p>Ge49 Use atlases, globes, maps and digital / computer mapping at a range of scales</p>

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Science
Come Fly With Me! America / Cosmopolitan
<p>Concepts</p> <p>A. To distinguish between an object and the material from which it is made</p> <p>B. To understand the difference between man-made and natural materials and identify and sort both</p>
<p>Skills</p> <p>Sc38 Plan different types of scientific investigations</p> <p>Sc39 Make predictions based on scientific knowledge</p> <p>Sc40 Carry out a range of scientific investigations</p> <p>Sc46 Select information from provided sources</p> <p>Sc47 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</p> <p>Sc48 Produce written explanations of results, causal explanations and conclusions</p> <p>Sc49 Use results to make predictions for further tests</p>
Mission Control
<p>Concepts</p> <p>A. To know that the Sun, Earth and Moon are approximately spherical bodies (NC)</p> <p>B. To know about and explain the movement of the Earth relative to the Sun in the solar system (NC)</p> <p>C. To use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky (NC)</p> <p>D. To know about and explain the movement of the Moon relative to the Earth (NC)</p>
<p>Skills</p> <p>Sc39 Make predictions based on scientific knowledge</p> <p>Sc42 Identify trends and patterns and offer explanations for these</p> <p>Sc46 Select information from provided sources</p> <p>Sc47 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</p>
Full Of Beans / Too Hot to Handle
<p>Concepts</p> <p>A. To identify common appliances that run on electricity</p> <p>B. To compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on / off positions of switches (NC)</p> <p>C. To be able to associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit (NC)</p> <p>D. To know how to use recognised symbols when representing a simple circuit in a diagram (NC)</p> <p>E. To understand the term 'energy' and identify a range of different renewable and non-renewable energy sources</p>
<p>Skills</p> <p>Sc38 Plan different types of scientific investigations</p> <p>Sc39 Make predictions based on scientific knowledge</p> <p>Sc40 Carry out a range of scientific investigations</p> <p>Sc41 Begin to recognise and control variables where appropriate during investigations</p> <p>Sc43 Carry out a fair test explaining why it is fair</p> <p>Sc47 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs</p>

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History
Come Fly With Me! America
<p>Concepts</p> <p>NC - Pupils should be taught about a non-European society that provides contrasts with British history</p> <p>B. To learn about the discovery of America</p> <p>C. To know about the Native Americans</p>
<p>Skills</p> <p>Hi35 Identify and describe reasons for and results of historical events, situations and changes</p>
Cosmopolitan
<p>Concepts</p> <p>A. To understand why people emigrated to New York and the influence they had on the city</p> <p>B. To learn about some of the impacts of colonisation on the indigenous peoples of Sydney</p> <p>C. To understand why people emigrated to Sydney</p>
<p>Skills</p> <p>Hi32 Investigate the characteristic features of, and changes within, periods of history</p> <p>Hi35 Identify and describe reasons for and results of historical events, situations and changes</p> <p>Hi37 Identify and describe the effects of some economic, technological and scientific developments</p> <p>Hi38 Place events, people and changes into correct periods of time</p>
You're Not Invited
<p>Concepts</p> <p>NC - Pupils should be taught about the Roman Empire and its impact on Britain</p> <p>A. To learn the meaning of the word 'invasion' and understand the possible reasons for and consequences of an invasion</p> <p>B. To know the location of Italy and the Roman Empire</p> <p>C. To understand why the Roman Army was so successful in their invasions</p> <p>D. To learn about some of the famous battles that took place during the Roman era</p> <p>E. To understand the positive impact of the Roman invasions on the inhabitants of those countries invaded</p>
<p>Skills</p> <p>Hi32 Investigate the characteristic features of, and changes within, periods of history</p> <p>Hi33 Devise historically valid questions about change, similarity and difference and investigate to find possible answers</p> <p>Hi34 Investigate events in the past using primary and secondary sources</p> <p>Hi35 Identify and describe reasons for and results of historical events, situations and changes</p> <p>Hi36 Recognise primary and secondary sources</p> <p>Hi37 Identify and describe the effects of some economic, technological and scientific developments</p> <p>Hi38 Place events, people and changes into correct periods of time</p> <p>Hi39 Use dates and vocabulary relating to the passing of time, including ancient, modern, CE, BC, BCE, AD, century and decade</p> <p>Hi40 Interpret historical evidence</p> <p>Hi41 Select and organise relevant historical information, making appropriate use of dates and terms</p>
The Rescuers
<p>Concepts</p> <ul style="list-style-type: none"> To learn about the sinking of the famous ship, the Titanic To learn about the communication on the Titanic and how communication methods changed in the last one hundred years To learn about the chronology of the relevant events leading up to the sinking of the Titanic To draw conclusions about what led to the sinking of the Titanic To understand the role played by Molly Brown in the rescue effort To understand the role played by Harold Bride in the rescue effort
<p>Skills</p> <p>Hi33 Devise historically valid questions about change, similarity and difference and investigate to find possible answers</p> <p>Hi34 Investigate events in the past using primary and secondary sources</p> <p>Hi35 Identify and describe reasons for and results of historical events, situations and changes</p> <p>Hi36 Recognise primary and secondary sources</p> <p>Hi37 Identify and describe the effects of some economic, technological and scientific developments</p> <p>Hi39 Use dates and vocabulary relating to the passing of time, including ancient, modern, BC, BCE, AD, century and decade</p>

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<p>Hi40 Interpret historical evidence</p> <p>Hi41 Select and organise relevant historical information, making appropriate use of dates and terms</p>
Pharaoh Queen
<p>Concepts</p> <p>NC - Pupils should be taught about an Early Civilization e.g. Egypt</p> <ul style="list-style-type: none"> To know the location of Egypt To know about the significant Ancient Egyptian places and individuals To know about Ancient Egyptian beliefs and practices To understand how evidence is used to make historical claims To understand the importance of the River Nile in Ancient Egyptian times To learn about the third female pharaoh, Hatshepsut
<p>Skills</p> <p>Hi32 Investigate the characteristic features of, and changes within, periods of history</p> <p>Hi33 Devise historically valid questions about change, similarity and difference and investigate to find possible answers</p> <p>Hi34 Investigate events in the past using primary and secondary sources</p> <p>Hi35 Identify and describe reasons for and results of historical events, situations and changes</p> <p>Hi38 Place events, people and changes into correct periods of time</p> <p>Hi40 Interpret historical evidence</p> <p>Hi41 Select and organise relevant historical information, making appropriate use of dates and terms</p>
Mission Control
<p>Concepts</p> <p>A. To learn about space exploration and discovery</p> <p>B. To develop knowledge and understanding of famous astronomers, as well as significant worldwide astronauts</p> <p>C. To learn about the development and role of satellite communication</p>
<p>Skills</p> <p>Hi32 Investigate the characteristic features of, and changes within, periods of history</p> <p>Hi33 Devise historically valid questions about change, similarity and difference and investigate to find possible answers</p> <p>Hi34 Investigate events in the past using primary and secondary sources</p> <p>Hi35 Identify and describe reasons for and results of historical events, situations and changes</p> <p>Hi36 Recognise primary and secondary sources</p> <p>Hi40 Interpret historical evidence</p> <p>Hi41 Select and organise relevant historical information, making appropriate use of dates and terms</p>
True Crime? Pendle Witches
<ul style="list-style-type: none"> To know about some aspects of life in Lancashire in the early 1600s To know about the accusations of witchcraft To know what evidence is and analyse initial evidence for the Pendle Witch trials To know the order of events leading to the Pendle Witches' arrest To analyse further evidence in the form of convictions To know and understand the role Jennet Device played in convicting the witches To know that persecution based on religion and belief still occurs today
<p>Skills</p> <p>Hi32 Investigate the characteristic features of, and changes within, periods of history</p> <p>Hi33 Devise historically valid questions about change, similarity and difference and investigate to find possible answers</p> <p>Hi34 Investigate events in the past using primary and secondary sources</p> <p>Hi35 Identify and describe reasons for and results of historical events, situations and changes</p> <p>Hi36 Recognise primary and secondary sources</p> <p>Hi38 Place events, people and changes into correct periods of time</p> <p>Hi40 Interpret historical evidence</p> <p>Hi41 Select and organise relevant historical information, making appropriate use of dates and terms</p>

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Year 5
Art
Come Fly With Me! America
<p>Painting</p> <p>Skills Development</p> <ul style="list-style-type: none"> To learn about different types of paint and explore their capabilities on a range of surfaces <p>Concepts</p> <p>NC - To know about great artists, architects and designers</p> <ul style="list-style-type: none"> To know that Jackson Pollock is famous for abstract art To understand that his paintings are not meant to represent specific objects / people To identify their own feelings and emotions when looking at his paintings
<p>Skills</p> <p>Ar72 Painting Work on preliminary studies to test media and materials. Investigate, explore and record information to generate imaginative ideas</p> <p>Ar75 Compare and comment on ideas, methods and approaches used in their own and others' work, beginning to relate these to intention, in order to adapt and improve outcomes</p> <p>Ar78 Painting Create imaginative work from a variety of sources</p>
Cosmopolitan
<p>Painting</p> <p>Skills Development</p> <ul style="list-style-type: none"> To learn about different types of paint and explore their capabilities on a range of surfaces <p>Concepts</p> <p>NC - To know about great artists, architects and designers</p> <ul style="list-style-type: none"> To learn about different types of paint and explore their capabilities on a range of surfaces To know that John Curtis is well-known for his landscape pieces using mixed media
<p>Skills</p> <p>Ar72 Painting Work on preliminary studies to test media and materials. Investigate, explore and record information to generate imaginative ideas</p> <p>Ar75 Compare and comment on ideas, methods and approaches used in their own and others' work, beginning to relate these to intention, in order to adapt and improve outcomes</p> <p>Ar78 Painting Create imaginative work from a variety of sources</p>
Mission Control
<p>Painting</p> <p>Concepts</p> <p>NC - To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials</p> <ul style="list-style-type: none"> To learn about primary and secondary colours and what they can be used for e.g. warm colours, cold colours, complementary colours To learn about colour wheels, including tints, tones, shades and hues To understand when you apply paint and materials (e.g. sand, sugar grit) to different types of paper, it will create different textures
<p>Skills</p> <p>Ar72 Painting Work on preliminary studies to test media and materials</p> <p>Ar75 Compare and comment on ideas, methods and approaches used in their own and others' work, beginning to relate these to intention, in order to adapt and improve outcomes</p> <p>Ar77 Painting Demonstrate a secure knowledge about primary and secondary, warm and cold, complementary and contrasting colours</p> <p>Ar78 Painting Create imaginative work from a variety of sources</p>
You're Not Invited
<p>3D Form</p> <p>Concepts</p> <p>NC - To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials</p> <ul style="list-style-type: none"> To know how to make a slab pot To know that Roman mosaics were common forms of decoration during the reign of the Roman Empire To learn about the significance of Roman mosaic art and their designs
<p>Skills</p>

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Ar75 Compare and comment on ideas, methods and approaches used in their own and others' work, beginning to relate these to intention, in order to adapt and improve outcomes

Ar84 3-D Form Use recycled, natural and man-made materials to create sculpture

Ar85 3-D Form Plan a sculpture through drawing and other preparatory work

Ar86 Design and create images and artefacts in response to personal ideas and for clearly defined purposes by selecting and developing techniques and using a range of materials

Full Of Beans

Drawing

Skills Development

- To explore different drawing stimuli

Concepts

NC - To create sketch books to record their observations and use them to review and revisit ideas

NC - To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials

- To know that different drawing implements are used to create light and dark effects
- To investigate the colour green and understand links e.g. green can symbolise love, associated with Venus
- To know how to create different shades and tones of green

Skills

Ar70 Drawing Research and use a variety of source material for their work

Ar71 Drawing Explore the potential properties of the visual elements of line, tone, pattern, texture, colour and shape

Ar73 Drawing Work in a sustained and independent way from observation, experience and imagination

Ar76 Drawing Use a sketchbook to develop ideas

Ar86 Design and create images and artefacts in response to personal ideas and for clearly defined purposes by selecting and developing techniques and using a range of materials

Too Hot to Handle

Drawing/Painting

Skills Development

- To explore different drawing stimuli

Concepts

NC - To create sketch books to record their observations and use them to review and revisit ideas

NC - To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials

- To know how primary and secondary colours can form tertiary colours
- To understand how colours can be classified as cold and warm and the effect that has on the viewer

Skills

Ar70 Drawing Research and use a variety of source material for their work

Ar71 Drawing Explore the potential properties of the visual elements of line, tone, pattern, texture, colour and shape

Ar72 Painting Work on preliminary studies to test media and materials

Ar73 Drawing Work in a sustained and independent way from observation, experience and imagination

Ar76 Drawing Use a sketchbook to develop ideas

Ar77 Painting Demonstrate a secure knowledge about primary and secondary, warm and cold, complementary and contrasting colours

Ar86 Design and create images and artefacts in response to personal ideas and for clearly defined purposes by selecting and developing techniques and using a range of materials

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Year 5
Design Technology
You're Not Invited
<p>Concepts</p> <p>NC - 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>NC - 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>NC - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</p> <p>NC - Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>NC - Investigate and analyse a range of existing products</p> <p>NC - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <ul style="list-style-type: none"> Design and make a sleeping place suitable for a soldier
<p>Skills</p> <p>Di35 Investigate ways of meeting design challenges with a construction focus</p> <p>Di38 Analyse a range of existing products</p> <p>Di40 Plan what they have to do, including how to use materials, equipment and processes</p> <p>Di41 Communicate design ideas in different ways e.g. discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p>
Mission Control
<p>Concepts</p> <p>NC - 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>NC - 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>NC - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</p> <p>NC - Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>NC - Investigate and analyse a range of existing products</p> <p>NC - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <ul style="list-style-type: none"> Design and make a model of a time-keeping device suitable for a spaceman
<p>Skills</p> <p>Di35 Investigate ways of meeting design challenges with a construction focus</p> <p>Di36 Investigate how the work of individuals in design and technology has helped to shape the world</p> <p>Di37 Identify users' views and take these into account</p> <p>Di38 Analyse a range of existing products</p> <p>Di39 Estimate and measure using appropriate instruments and units</p> <p>Di40 Plan what they have to do, including how to use materials, equipment and processes</p> <p>Di41 Communicate design ideas in different ways e.g. discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>Di42 Apply knowledge of mechanical and electrical control when designing and making functional products</p>
Come Fly with Me! America / Cosmopolitan - Mechanisms - Structures I
<p>Concepts - Come Fly with Me! America</p> <p>NC - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <ul style="list-style-type: none"> Join up frames to create a bridge <p>Concepts - Cosmopolitan</p> <p>NC - 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>NC - Select from and use a wider range of materials and components, including construction materials,</p>

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<p>textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p>NC - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <ul style="list-style-type: none"> To design and make a model of a New York City street influenced by the architecture and populations of New York city
<p>Skills</p> <p>Di35 Investigate ways of meeting design challenges with a construction focus</p> <p>Di36 Investigate how the work of individuals in design and technology has helped to shape the world</p> <p>Di39 Estimate and measure using appropriate instruments and units</p> <p>Di40 Plan what they have to do, including how to use materials, equipment and processes</p> <p>Di41 Communicate design ideas in different ways e.g. discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design</p>
A World of Bright Ideas - Mechanisms - Structures 2
<p>Concepts</p> <p>NC - select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</p> <p>NC - Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages)</p> <p>NC - Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</p> <ul style="list-style-type: none"> Design, make and evaluate a three wheeled 'racer'
<p>Skills</p> <p>Di35 Investigate ways of meeting design challenges with a construction focus</p> <p>Di40 Plan what they have to do, including how to use materials, equipment and processes</p> <p>Di42 Apply knowledge of mechanical and electrical control when designing and making functional products</p> <p>Di43 Refine sequences of instructions to control events or make things happen</p>
Wars of the World / Clash of the Titans - Electronics 1
<p>Concepts</p> <p>NC - Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</p> <p>NC - Apply their understanding of computing to program, monitor and control their products</p> <ul style="list-style-type: none"> Design, make and evaluate a device to send Morse Code signals
<p>Skills</p> <p>Di36 Investigate how the work of individuals in design and technology has helped to shape the world</p> <p>Di38 Analyse a range of existing products</p> <p>Di40 Plan what they have to do, including how to use materials, equipment and processes</p> <p>Di41 Communicate design ideas in different ways e.g. discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design</p> <p>Di42 Apply knowledge of mechanical and electrical control when designing and making functional products</p> <p>Di43 Refine sequences of instructions to control events or make things happen</p>
Full of Beans / Too Hot to Handle - Electronics 2
<p>Concepts</p> <p>NC - Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</p> <p>NC - Apply their understanding of computing to program, monitor and control their products</p> <ul style="list-style-type: none"> Design, make and evaluate a traffic control system
<p>Skills</p> <p>Di39 Estimate and measure using appropriate instruments and units</p> <p>Di40 Plan what they have to do, including how to use materials, equipment and processes</p> <p>Di41 Communicate design ideas in different ways e.g. discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design</p> <p>Di42 Apply knowledge of mechanical and electrical control when designing and making functional products</p> <p>Di43 Refine sequences of instructions to control events or make things happen</p>
I Have a Dream - Textiles
<p>Concepts</p> <p>NC - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional</p>

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and exploded diagrams, prototypes, pattern pieces and computer-aided design

NC - Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

- Make a cushion, following a pattern

Skills

Dt38 Analyse a range of existing products

Dt39 Estimate and measure using appropriate instruments and units

Dt40 Plan what they have to do, including how to use materials, equipment and processes

Dt41 Communicate design ideas in different ways e.g. discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design

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Year 5
Music
Come Fly With Me! America / Cosmopolitan
<p>Skills Development</p> <ul style="list-style-type: none"> To understand the importance of diaphragmatic breathing when singing To understand what a round is and learn to sing a round in two parts <p>Concepts</p> <p>NC - Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians</p> <ul style="list-style-type: none"> To know what a national anthem is and its purpose To know the meaning of 'crescendo' To know that music can affect mood and emotions To know which orchestral families some instruments belong to To be able to correctly play a range of percussion instruments
<p>Skills</p> <p>Mu38 Improvise melodic and rhythmic phrases</p> <p>Mu39 Compose from different starting points by developing ideas within musical structures</p> <p>Mu43 Describe and compare different kinds of music using key musical vocabulary</p> <p>Mu44 Listen carefully, developing and demonstrating musical understanding</p> <p>Mu46 Perform rounds and part songs, maintaining their own part with awareness of how different parts fit together to achieve an overall effect</p> <p>Mu49 Compose their own instrumental and vocal music and perform their own and others' compositions</p>
Mission Control
<p>Skills Development</p> <ul style="list-style-type: none"> To understand what metre is and its relationship to beat To know how to identify metre within a piece of music To know what a polyrhythm is <p>Concepts</p> <p>NC - Use and understand staff and other musical notations</p> <ul style="list-style-type: none"> To understand what a cyclic pattern is To understand the difference between strong and weak beats in a piece of music To know what metre means To know how to notate a simple melody, using letter names or on a staff To know what a musical is and the features of this genre
<p>Skills</p> <p>Mu38 Improvise melodic and rhythmic phrases</p> <p>Mu39 Compose from different starting points by developing ideas within musical structures</p> <p>Mu40 Explore the use of notation and ICT to support creative work</p> <p>Mu41 Suggest improvements to their own and others' work</p> <p>Mu42 Identify the relationship between sounds and how music reflects different intentions</p> <p>Mu45 Perform by ear</p> <p>Mu47 Sing songs with increasing control of breathing, posture and sound projection</p> <p>Mu48 Use ICT to change and manipulate sounds</p> <p>Mu49 Compose their own instrumental and vocal music and perform their own and others' compositions</p>
You're Not Invited
<p>Skills Development</p> <ul style="list-style-type: none"> To use listening skills to identify and distinguish between a wider range of dynamics To create sounds with a range of dynamics, with accuracy <p>Concepts</p> <p>NC - Improvise and compose music for a range of purposes using the inter-related dimensions of music</p> <ul style="list-style-type: none"> To know that music is used for different purposes, including keeping spirits up in battle To understand how pitch and dynamics have an impact on the overall effect of a piece of music To know the impact that tempo and beat have on a piece of music To know about the origins of the Haka and its meaning

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Skills

Mu38 Improvise melodic and rhythmic phrases

Mu39 Compose from different starting points by developing ideas within musical structures

Mu41 Suggest improvements to their own and others' work

Mu42 Identify the relationship between sounds and how music reflects different intentions

Mu49 Compose their own instrumental and vocal music and perform their own and others' compositions

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Year 5
Computing
Mission Control - Multimedia (Vector Artwork)
<p>Concepts</p> <p>NC - Know how to 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</p> <ul style="list-style-type: none"> To understand and know how to create vector artwork <p>INFORMATION TECHNOLOGY</p> <p>Pupils will learn how to use search technologies effectively, learning about search engines and search operators. This is not a standalone lesson but linked to one of the History lessons in the theme.</p> <p>Concepts</p> <p>NC - Know how to use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <ul style="list-style-type: none"> To know how to use search technologies effectively
<p>Skills</p> <p>Mm10 Analyse, describe and discuss the effectiveness of the work with ICT</p> <p>Mm11 Use a variety of ICT tools to create, develop and refine presentations and performances, integrating effect to enhance outcomes</p> <p>Mm12 Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p>Mm14 Use a variety of ICT tools to create, refine and present work in a variety of digital and printed formats using appropriate forms and conventions.</p> <p>IT7 Understand computer networks including the Internet, recognizing how they can provide multiple services, such as the world-wide-web.</p> <p>IT8 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>
Full of Beans / Too Hot to Handle - Multimedia (Video Editing)
<p>Concepts</p> <p>NC - Know how to 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</p> <ul style="list-style-type: none"> To know how to use video editing software to create a short movie clip
<p>Skills</p> <p>Mm10 Analyse, describe and discuss the effectiveness of the work with ICT</p> <p>Mm11 Use a variety of ICT tools to create, develop and refine presentations and performances, integrating effect to enhance outcomes</p> <p>Mm12 Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p>Mm13 Organise and adjust communication according to the needs of the audience and the technology, including taking account of the quality and content of the communication</p> <p>Mm14 Use a variety of ICT tools to create, refine and present work in a variety of digital and printed formats using appropriate forms and conventions.</p>
You're Not Invited (CAD - Computer Aided Design)
<p>Concepts</p> <p>NC - To 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</p> <p>NC - To use technology safely, respectfully and responsibly; recognise acceptable / unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <ul style="list-style-type: none"> To understand and know how to use CAD (Computer-Aided Design)
<p>Skills</p> <p>Mm10 Analyse, describe and discuss the effectiveness of the work with ICT</p> <p>Mm12 Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>

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Mm14 Use a variety of ICT tools to create, refine and present work in a variety of digital and printed formats using appropriate forms and conventions.

Come Fly With Me! America / Cosmpolitan (Data)

Concepts

NC - To 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

· To know how to use spreadsheet software to collect, store, analyse and represent data

Skills

D5 Use ICT to explore and develop simple models by changing variables and simple formulae

D6 Answer questions by using ICT to identify, collect, store, analyse and present information

D7 Represent data from analysis in appropriate ways, including the use of graphs

Mm12 Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information

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Year 5
PSHE - Additional 3D PSHE Lessons
Autumn 1
<p>Core 3 Unit 1 Lesson 1: Structure - Just Imagine</p> <p>Concepts</p> <ul style="list-style-type: none"> Understand why structure is needed in different situations Understand the term 'anarchy' and understand the implications of living in an anarchic society <p>Core 3 Unit 1 Lesson 2: Law and Order - In Charge</p> <p>Concepts</p> <ul style="list-style-type: none"> Know and understand the meaning of the following :- democracy, sovereignty, dictatorship, government, monarchy <p>Core 3 Unit 1 Lesson 3: U.N Rights - Our Rights</p> <p>Concepts</p> <ul style="list-style-type: none"> Learn about organisations such as the United Nations Understand the importance and significance of equal rights
<p>Skills</p> <p>PW52 Talk, write and explain their views on issues that affect the wider environment</p> <p>PW55 Take action based on responsible choices</p> <p>HW2 Recognise right and wrong, what is fair and unfair and explain why</p> <p>HW4 Recognise and respect similarities and differences between people</p> <p>HW15 Listen to, reflect on and respect other people's views and feelings</p> <p>HW17 Self-assess, understanding how this will help their future actions</p> <p>Ci2 Recognise the difference between right and wrong and what is fair and unfair</p> <p>Ci17 Recognise how rights need to be balanced against responsibilities in order to protect individuals and communities from injustice</p> <p>Ci19 Recognise that people's basic needs are the same around the world, discussing why some societies are more able to meet these needs than others</p> <p>Ci21 Discuss how people can live and work together to benefit their communities</p> <p>Ci23 Consider the main features of a democracy</p> <p>Ci24 Work collaboratively towards common goals</p> <p>Ci25 Reach agreements, make decisions and manage discussions to achieve positive results</p> <p>Ci26 Engage actively with democratic processes and address issues of concern to them through their actions and decision-making</p>
Autumn 2
<p>Core 2 Unit 4 Lesson 5: Online Relationships - A Risky Business</p> <p>Concepts</p> <ul style="list-style-type: none"> Know that the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others online including when we are anonymous Know how to critically consider their online friendships and sources of information including awareness of the risks associated with people they have never met Know that the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health <p>Core 1 Unit 5 Lesson 1: Drugs - Just Say No!</p> <p>Core 1 Unit 5 Lesson 2: Alcohol - Drink Aware</p> <p>Concepts</p> <ul style="list-style-type: none"> Know the facts about legal and illegal harmful substances and associated risks, including smoking, alcohol use and drug-taking
<p>Skills</p> <p>PW55 Take action based on responsible choices</p> <p>PW56 Develop strategies for understanding, managing and controlling strong feelings and emotions and dealing with negative pressures</p> <p>PW57 Identify the different kinds of risks associated with the use and misuse of a range of substances and the impact that misuse of substances can have on individuals, their families and friends</p> <p>PW62 Make responsible informed decisions relating to medicines, alcohol, tobacco and other substances and drugs</p>
Spring 1
<p>Core 1 Unit 5 Lesson 3: Tobacco - Up In Smoke</p> <p>Core 1 Unit 5 Lesson 4: Substance Abuse - Let's Be Frank</p> <p>Concepts</p> <ul style="list-style-type: none"> Know the facts about legal and illegal harmful substances and associated risks, including smoking, alcohol use and drug-taking

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<p>Skills</p> <p>PW55 Take action based on responsible choices</p> <p>PW56 Develop strategies for understanding, managing and controlling strong feelings and emotions and dealing with negative pressures</p> <p>PW57 Identify the different kinds of risks associated with the use and misuse of a range of substances and the impact that misuse of substances can have on individuals, their families and friends</p> <p>PW62 Make responsible informed decisions relating to medicines, alcohol, tobacco and other substances and drugs</p>
Spring 2
<p>Core 1 Unit 1 Lesson 1: Physical, Emotional and Mental - 3-Dimensional</p> <p>Concepts</p> <ul style="list-style-type: none"> Know that mental wellbeing is a normal part of daily life, in the same way as physical health Know about the basic synergy between physical emotional and mental health <p>Core 1 Unit 1 Lesson 2: Physical, Emotional and Mental - What's Puberty</p> <p>Concepts</p> <ul style="list-style-type: none"> Know key facts about puberty and the changing adolescent body, particularly from age 9 through to age 11, including physical and emotional changes <p>Core 1 Unit 1 Lesson 3: Healthy Lifestyle - You Choose!</p> <p>Concepts</p> <ul style="list-style-type: none"> Know and understand the characteristics and mental and physical benefits of an active lifestyle Understand the importance of making changes in adopting a more healthy lifestyle
<p>Skills</p> <p>PW30 Begin to reflect on their worth as individuals by identifying positive things about themselves and their achievements</p> <p>PW35 Show awareness of changes that take place as they grow</p> <p>PW53 Reflect on how to deal with feeling about themselves, their family and others in a positive way</p> <p>PW56 Develop strategies for understanding, managing and controlling strong feelings and emotions and dealing with negative pressures</p> <p>PW58 Recognise that when the body changes during puberty it can affect feelings and behaviour</p> <p>PW60 Understand the physical and emotional changes that take place during puberty, why they are taking place and the importance of person hygiene</p> <p>PW61 Take responsibility for their physical activity and nutrition in achieving a physically and mentally healthy lifestyle</p> <p>PW64 Identify how to find information and advice through help lines</p> <p>PW65 Recognise how new relationships may develop</p> <p>PW68 Manage changing emotions and recognise how they can impact on relationships</p> <p>HW11 Recognise how their behaviour and that of others may influence people both positively and negatively</p> <p>HW16 Negotiate and present their own views</p> <p>HW18 Work and play independently and in groups, showing sensitivity to others</p>
Summer 1
<p>Concepts</p> <p>Core 1 Unit 2 Lesson 1: Food Choices - Secret Eaters</p> <p>Concepts</p> <ul style="list-style-type: none"> Know what constitutes a healthy diet (including understanding calories and other nutritional content) Know about the different food groups and their related importance as a part of a balanced diet Develop an awareness of their own dietary needs <p>Core 2 Unit 1 Lesson 1: Confidentiality - Secret Info</p> <p>Concepts</p> <ul style="list-style-type: none"> Know the importance of permissions-seeking and giving in relationships with friends, peers and adults Recognise that there are many different ways to communicate Understand the need for confidentiality in certain situations <p>Core 2 Unit 4 Lesson 1: Physical Contact - Touch Sensitive</p> <p>Concepts</p> <ul style="list-style-type: none"> Know that each person's body belongs to them, and the differences between appropriate and inappropriate or unsafe physical, and other, contact Know about and understand the importance of touch in a range of contexts Know the difference between appropriate and inappropriate touches Know how to recognise and report feelings of being unsafe or feeling bad about any adult
<p>Skills</p>

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PW59 Recognise when physical contact is acceptable and unacceptable
PW67 Judge what kind of physical contact is acceptable or unacceptable in relationships
HW5 Recognise and respond to issues of safety relating to themselves and others and how to get help
HW16 Negotiate and present their own views
HW26 Take responsibility for their own safety and the safety of others and be able to seek help in an emergency
Ci15 Work co-operatively, showing fairness and consideration to others
Ci25 Reach agreements, make decisions and manage discussions to achieve positive results
Summer 2
Core 1 Unit 5 Lesson 5: Basic First Aid - First Aid Tips
Concepts
<ul style="list-style-type: none"> Know concepts of basic first-aid, for example dealing with common injuries, including head injuries
Skills
PW55 Take action based on responsible choices
HW5 Recognise and respond to issues of safety relating to themselves and others and how to get help
HW11 Recognise how their behaviour and that of others may influence people both positively and negatively
HW26 Take responsibility for their own safety and the safety of others and be able to seek help in an emergency

PSHE - Safe Zone

Year 5
PSHE / Computing
Lesson 1 - Privacy and Security (Autumn 1)
Mission: To understand the practice of changing passwords regularly, create strong passwords and understand privacy and permissions In this lesson, pupils will develop their knowledge of privacy and security by exploring permissions that websites and apps request (and the reasons they do so). Pupils will begin to understand terms and conditions and why it is important to not just blindly tick yes to everything on the internet. They will create new strong passwords containing random letters, numbers and symbols and build upon their knowledge of why it is important to change these regularly.
Objectives <ul style="list-style-type: none"> I can explain what a strong password is and demonstrate how to create one. I can explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others. I can explain what app permissions are and can give some examples.
Key Vocabulary permissions, data, accept, company, money, profit, password, strong, special character, share, secure
Lesson 2 - Self-Image and Identity (Autumn 2)
Mission: To update our avatar for online presence and demonstrate a positive online presence In this lesson, pupils will learn the difference between copying, modifying and altering information and the reasons why people do this online. They will learn how to ensure they keep their online identity safe, positive, and respectful, ensuring they think about their future when they post anything online. Pupils will then update their online avatars to a more recent likeness of themselves.
Objectives <ul style="list-style-type: none"> I can explain how identity online can be copied, modified or altered. I can demonstrate how to make responsible choices about having an online identity, depending on context.
Key Vocabulary copy, modify, alter, impersonate, parody, prank, bully, catfish, identity, avatar, safety, security, presence, represent, change
Lesson 3 - Online Reputation & Managing Online Information (Spring 1)
Mission: Be sceptical and evaluate digital content before taking it as fact In this lesson, pupils will look at how the internet can be used to influence people, the reason this happens, and how they can be more aware of it. They will develop a knowledge of how companies can influence what you see online by using data to target posts to audiences, and

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use paid partnerships, boosted posts, sponsored ads, etc. Pupils will then use their Knowledge CHASERS skills to check the validity of the Safe Zone 'Paid Partnership' with Dog Island.

Objectives

- I can search for information about an individual online and summarise the information found.
- I can describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect.
- I can explain the benefits and limitations of using different types of search technologies e.g. voice-activation search engine. I can explain how some technology can limit the information I am presented with e.g. voice-activated searching giving one result.
- I can explain what is meant by 'being **sceptical**'; I can give examples of when and why it is important to be 'sceptical'.
- I can evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results.
- I can explain key concepts including information, reviews, fact, opinion, belief, validity, reliability and evidence.
- I can identify ways the internet can draw us to information for different agendas, e.g. website notifications, **pop-ups**, targeted ads.
- I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by **vloggers, content creators, influencers**).
- I can explain what is meant by the term 'stereotype', how 'stereotypes' are amplified and reinforced online, and why accepting 'stereotypes' may influence how people think about others.
- I can describe how **fake news** may affect someone's emotions and behaviour, and explain why this may be harmful.
- I can explain what is meant by a '**hoax**'. I can explain why someone would need to think carefully before they share.

Key Vocabulary

influence, commercialism, advertising, sponsor, promote, monetise, cookies, information, product placement, tailor, developer, fact, fiction

Lesson 4 - Health, Well-Being and Lifestyle (Spring 2)

Mission:

To understand the effect technology can have on our health and well-being both positive and negative

In this lesson, pupils will look at the positive and negative impact technology can have on their health and well-being and will look at steps they can take to look after themselves whilst using tech. Pupils will look at mindfulness and meditation apps or videos to see the positive effect technology can have on their health, well-being, and lifestyle. Pupils will then develop their knowledge of online purchasing and the effect this can have on our health. They will learn about loot boxes and other online offers and why these can be particularly risky.

Objectives

- I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively.
- I can describe some strategies, tips or advice to promote health and well-being with regards to technology.
- I recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals.
- I can explain how and why some apps and games may request or take payment for additional content (e.g. **in-app purchases, loot boxes**) and explain the importance of seeking permission from a trusted adult before purchasing.

Key Vocabulary

mindfulness, meditation, relaxation, awareness, focus, health, mental health, hormones, age-appropriate, access, support, guidance, loot box, online purchasing, chance, gambling, finance

Lesson 5 - Copyright and Ownership (Summer 1)

Mission:

To understand when online content can be reused and give examples

In this lesson, pupils will learn more about the reuse of content online. They will understand that some content is available to reuse and that some creators actively encourage users to repost their content. Pupils will review the copyright and content sharing guidance of gaming companies and use these to create their own tutorials or information pages.

Objectives

- I can assess and justify when it is acceptable to use the work of others.
- I can give examples of content that is permitted to be reused and know how this content can be found online.

Key Vocabulary

reuse, sharing, content, ownership, fair dealing/use, breach, license, guidelines, attribution

Lesson 6 - Online Relationships & Online Bullying (Summer 2)

To create an anti-cyberbullying video

In this lesson, pupils will develop their knowledge of cyber-bullying and staying safe online. They will play the Think U Know Band Runner game where they face different online scenarios and must deal with them appropriately. They will then develop their knowledge of online

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relationships and online Bullying by watching a series of videos and researching using the internet. Finally, they will use this knowledge to create an anti-cyberbullying video for others to watch.

Objectives

- I can give examples of technology-specific forms of communication (e.g. emojis, memes and GIFs).
- I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my /our fault.
- I can describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make positive contributions. (e.g. gaming communities or social media groups).
- I can explain how someone can get help if they are having problems and identify when to tell a trusted adult.
- I can demonstrate how to support others (including those who are having difficulties) online.
- I can recognise online bullying can be different to bullying in the physical world and can describe some of those differences.
- I can describe how what one person perceives as playful joking and teasing (including 'banter') might be experienced by others as bullying.
- I can explain how anyone can get help if they are being bullied online and identify when to tell a trusted adult.
- I can identify a range of ways to report concerns and access support both in school and at home about online bullying.
- I can explain how to block abusive users.
- I can describe the helpline services which can help people experiencing bullying, and how to access them (e.g. Childline or The Mix).

Key Vocabulary

communication, scenario, emoji, information, help, advice, trusted adult, cyberbullying