Curriculum Map			
Lesson	**National Curriculum Prior Knowledge**	**National Curriculum Links**	**National Curriculum Guidance**
Assembly The life of Reginald Mitchell, the story of the Spitfire and Stoke-on-Trent's role in its story.	Pupils should be taught about: • the lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods, significant historical events, people and places in their own locality.	Pupils should be taught about: • a local history study. • a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066.	Examples (non-statutory) A local history study: • a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066). • a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.
History Marvellous Mitchell The life and times of Reginald Mitchell and his relationship to Stoke-on-Trent.	Pupils should be taught about: • changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life. • events beyond living memory that are significant nationally or globally [for example the first aeroplane flight or events commemorated through festivals or anniversaries].	Pupil should: • 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. • gain historical perspective by placing their growing knowledge into different contexts, understanding the connections	Examples (non-statutory) A local history study • a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066). • a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.

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	• the lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods. • significant historical events, people and places in their own locality.	between local, regional, national and international history. Pupils should be taught about: • a local history study. • a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066.	
History **Hidden History** The roles of others in the development, maintenance and activities of the Spitfire including those from across the commonwealth, Europe and beyond, and importantly the roles of women, especially in the ATA.	Pupils should be taught about: • changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life. • events beyond living memory that are significant nationally or globally [for example the first aeroplane flight or events commemorated through festivals or anniversaries]. • the lives of significant individuals in the past who have	Pupil should: • 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. • understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how	Examples (non-statutory) A local history study • a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066). • a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality.

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	contributed to national and international achievements. Some should be used to compare aspects of life in different periods. • significant historical events, people and places in their own locality.	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. Pupils should be taught about: • a local history study. • a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066.	
Science **Forces** **Wonderful Wings** The 4 forces for flight, including	Pupil should be able to: • find out how the shapes of solid objects made from some materials can be changed by	**Forces** Pupils should be taught to: • explain that unsupported objects fall towards the Earth	Notes and guidance (non-statutory) Pupils should explore falling objects and raise questions about the effects of air resistance.

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an activity where students create their own model plane and experiment with wing design.	squashing, bending, twisting and stretching. • compare how things move on different surfaces. • notice that some forces need contact between 2 objects, but magnetic forces can act at a distance. • observe how magnets attract or repel each other and attract some materials and not others.	because of the force of gravity acting between the Earth and the falling object. • identify the effects of air resistance, water resistance and friction, that act between moving surfaces. • recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect. (Wings)	They should explore the effects of air resistance by observing how different objects such as parachutes and sycamore seeds fall. They should experience forces that make things begin to move, get faster or slow down. Pupils should explore the effects of friction on movement and find out how it slows or stops moving objects, for example, by observing the effects of a brake on a bicycle wheel. Pupils should explore the effects of levers, pulleys and simple machines on movement. Pupils might find out how scientists, for example, Galileo Galilei and Isaac Newton helped to develop the theory of gravitation. Pupils might work scientifically by: exploring falling paper cones or cupcake cases, and designing and making a variety of parachutes and carrying out fair tests to determine which designs are the most effective. They might design and make products that use levers, pulleys, gears and/or springs and explore their effects.

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Science **Electricity** **Morse's Messages** Morse code and the Spitfire – the role it played in communications. Students create their own Morse Code messages using sound and light.	Pupils should be able to: • identify common appliances that run on electricity • construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit • recognise some common conductors and insulators, and associate metals with being good conductors	**Electricity** Pupils should be taught to: • associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • use recognised symbols when representing a simple circuit in a diagram	Notes and guidance (non-statutory) Building on their work in year 4, pupils should construct simple series circuits, to help them to answer questions about what happens when they try different components, for example, switches, bulbs, buzzers and motors. They should learn how to represent a simple circuit in a diagram using recognised symbols. Note: pupils are expected to learn only about series circuits, not parallel circuits. Pupils should be taught to take the necessary precautions for working safely with electricity. Pupils might work scientifically by: systematically identifying the effect of changing one component at a time in a circuit; designing and making a set of traffic lights, a burglar alarm or some other useful circuit.
Art & Design **Clever Camouflage** Students explore how Spitfires were camouflaged for	Pupil should: • produce creative work, exploring their ideas and recording their experiences	Pupil should: • produce creative work, exploring their ideas and recording their experiences	

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different arenas of war, different times of day, and where they were on the ground.	• 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. Pupils should be taught: • to use a range of materials creatively to design and make products • to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination • about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work.	• 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. Pupils should be taught: • to create sketch books to record their observations and use them to review and revisit ideas • about great artists, architects and designers in history There are also links to the Science Curriculum unit Evolution and Inheritance in this lesson as animals often adapt by camouflaging themselves to suit their environment. • identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.	

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Art & Design **Clever Camouflage** Students create their own camouflage swatches and photograph them against various backgrounds.	Pupils should: • 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. Pupils should be taught: • to use a range of materials creatively to design and make products. • to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination. • to develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space.	Pupils should: • 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. Pupils should be taught: • to create sketch books to record their observations and use them to review and revisit ideas. • to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay].	

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STEM Project Design and Technology 'What did Reginald Mitchell mean to Stoke-on-Trent?'	Pupils should be taught to: Design • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Make • select from and use a range of tools and equipment to perform practical tasks. • select from and use a wide range of materials and components, including construction materials. Evaluate • explore and evaluate a range of existing products. • evaluate their ideas and products against design criteria. Technical knowledge • explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	Pupils should be taught to: Design • generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. (Presentation-Tinker-Cad/Lego) Make • select from and use a wider range of tools and equipment to perform practical tasks. [for example, cutting, shaping, joining and finishing], accurately (Decorate a Spitfire/Model) Evaluate • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. (Presentation) • understand how key events and	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

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		individuals in design and technology have helped shape the world. (WW2 and RJ Mitchell - Google Maps) Technical knowledge • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] (Model/Lego) • apply their understanding of computing to program, monitor and control their products (Micro:Bits)	

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