

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 1	Animals including Humans: Identify and name a variety of common animals including fish, amphibians, reptiles, birds, and mammals. Identify and name a variety of common animals that are carnivores, herbivores, and omnivores. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets). Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Learn about bodies and senses in this varied and creative block. Observe changes over time and think about the question how do we change as we get older? Collect data, look for patterns and carry out investigations.	Plants & Hygiene: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. Outdoor learning to connect with the world of plants. From fruit and vegetables to flowers and trees, understand and observe them and even grow your own seeds and keep them healthy. How diseases are spread. Physical Health & Wellbeing: Health and prevention: About personal hygiene and germs including bacteria, viruses, how they are spread and treated, and the importance of handwashing. The facts and science relating to allergies immunisation and vaccination	Everyday Materials: Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Describe the simple physical properties of a variety of everyday materials.	Everyday Materials: Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Describe the simple physical properties of a variety of everyday materials.	Seasonal Changes: Observe changes across the 4 seasons. Observe and describe weather associated with the seasons and how day length varies. Look at weather forecasts and video your own school weather forecasts; do weather observations and make collages about the seasons; have fun with shadows; make a class weather station that can measure rainfall, wind direction and temperature. Physical Health & Wellbeing: Health and Prevention - Sun safety	(POND UNIT) Animals and Humans: Identify and name a variety of common animals including fish, amphibians, reptiles, birds, and mammals. Identify and name a variety of common animals that are carnivores, herbivores, and omnivores. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets). Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Look carefully at the behaviour and habitats of creatures found in the school grounds. Learn about a variety of common animals with a particular focus on the pets we keep and how we keep them happy and healthy.
	Technology: Draw on their own experience to help generate ideas	Food Technology: Draw on their own experience to help generate ideas	Food Technology: Draw on their own experience to help generate ideas	Technology: Draw on their own experience to help generate ideas	Technology: Draw on their own experience to help generate ideas	Technology: Draw on their own experience to help generate ideas

Science and Technology Progression Matrix

Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make	Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make	Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make	Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make	Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make	Suggest ideas and explain what they are going to do Identify a target group for what they intend to design and make
Model their ideas in card and paper	Develop their design ideas applying findings from their earlier research	Develop their design ideas applying findings from their earlier research	Model their ideas in card and paper	Model their ideas in card and paper	Model their ideas in card and paper
Develop their design ideas applying findings from their earlier research	Select and use appropriate fruit and vegetables, processes and tools	Select and use appropriate fruit and vegetables, processes and tools	Develop their design ideas applying findings from their earlier research	Develop their design ideas applying findings from their earlier research	Develop their design ideas applying findings from their earlier research
Make their design using appropriate techniques	Evaluate their product by discussing how well it works in relation to the purpose	Evaluate their product by discussing how well it works in relation to the purpose	Make their design using appropriate techniques	Make their design using appropriate techniques	Make their design using appropriate techniques
With help measure, mark out, cut and shape a range of materials	Evaluate their products as they are developed, identifying strengths and possible changes they might make	Evaluate their products as they are developed, identifying strengths and possible changes they might make	With help measure, mark out, cut and shape a range of materials	With help measure, mark out, cut and shape a range of materials	With help measure, mark out, cut and shape a range of materials
Use tools eg scissors and a hole punch safely	Evaluate their product by asking questions about what they have made and how they have gone about it	Evaluate their product by asking questions about what they have made and how they have gone about it	Use tools eg scissors and a hole punch safely	Use tools eg scissors and a hole punch safely	Use tools eg scissors and a hole punch safely
Assemble, join and combine materials and components together using a variety of temporary methods e.g., glues or masking tape	Food Tech: Jam sandwich using blackcurrants Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	Food Tech: Welsh Cakes Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	Assemble, join and combine materials and components together using a variety of temporary methods e.g., glues or masking tape	Assemble, join and combine materials and components together using a variety of temporary methods e.g., glues or masking tape	Assemble, join and combine materials and components together using a variety of temporary methods e.g., glues or masking tape
Select and use appropriate processes and tools			Select and use appropriate processes and tools	Select and use appropriate processes and tools	Select and use appropriate processes and tools
Use simple finishing techniques to improve the appearance of their product			Use simple finishing techniques to improve the appearance of their product	Use simple finishing techniques to improve the appearance of their product	Use simple finishing techniques to improve the appearance of their product
Evaluate their product by discussing how well it works in relation to the purpose			Evaluate their product by discussing how well it works in relation to the purpose	Evaluate their product by discussing how well it works in relation to the purpose	Evaluate their product by discussing how well it works in relation to the purpose
Evaluate their products as they are developed, identifying strengths and			Evaluate their products as they are developed, identifying strengths and	Evaluate their products as they are developed, identifying strengths and	Evaluate their products as they are developed, identifying strengths and

	<p>possible changes they might make</p> <p>Evaluate their product by asking questions about what they have made and how they have gone about it</p> <p>Theme Week Tech challenge: cars (distance & weight using a ramp)</p> <p>Technology: Playground structures e.g. swing and slide</p> <p>Gluing using glue gun, cutting using scissors & Tenon saw, joining, axels, measuring</p> <p>Scientist Study of: David Attenborough & Rachel Carson</p>			<p>possible changes they might make</p> <p>Evaluate their product by asking questions about what they have made and how they have gone about it</p> <p>Technology: Build a catapult and drawbridge (levers and pulleys) generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>Inventor Study of: James Dyson</p>	<p>possible changes they might make</p> <p>Evaluate their product by asking questions about what they have made and how they have gone about it</p> <p>Technology: Make windsocks</p> <p>Design purposeful and functional products based on design criteria. Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing].</p> <p>Select from and use a wide range of materials and components, including construction materials and textiles according to their characteristics. Evaluate their ideas and products against design criteria.</p> <p>Food Tech: Vegetable ratatouille</p> <p>Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.</p>	<p>possible changes they might make</p> <p>Evaluate their product by asking questions about what they have made and how they have gone about it</p> <p>Technology: 'toad abode' / frog hotel</p> <p>design purposeful, functional, appealing products for themselves and other users based on design criteria. Explore and evaluate a range of existing products.</p>
Year 2	<p>Plants: Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Learn why plants need</p>	<p>Use of Everyday Materials: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, and cardboard for uses.</p> <p>Find out how the shapes of</p>	<p>Animals including Humans: Notice that animals, including humans, have offspring which grow into adults.</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food,</p>	<p>Living Things & Their Habitats: Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>Identify that most living things live in habitats to which they are suited and</p>	<p>Animals including Humans: Notice that animals, including humans, have offspring which grow into adults.</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food,</p>	<p>Living Things & Their Habitats: Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>Identify that most living things live in habitats to which they are suited and</p>

Science and Technology Progression Matrix

<p>certain conditions to survive with an observation investigation and prediction. Create artwork based on the results of the observation investigation.</p> <p>Study the life cycle of a plant.</p>	<p>Solid objects made from some materials can be changed by squashing, bending, twisting, and stretching.</p> <p>Explore the useful properties of materials with a range of investigations involving absorbency, elasticity and flexibility to find out which paper is strongest. Discover which type of kitchen towel or cloth is most effective at mopping up spills; consider why building materials must be absorbent and which ones fit the bill; create artwork by exploring the textures of materials and learn all about wax and how to re-mould it.</p>	<p>and air).</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>Humans: Exploring and comparing the human body through experiments. Study the use of medicine and hygiene for our bodies to keep us healthy. Build understanding that exercise makes the heart work harder and that it is an essential part of a healthy lifestyle. Find out about healthy lunch box foods before designing and sharing your own snack.</p> <p>Healthy Eating: What constitutes a healthy diet (including understanding calories and other nutritional content).</p> <p>Health and Prevention: about dental health and the benefits of good oral hygiene and dental flossing, including regular check-ups at the dentist</p>	<p>describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p> <p>How can we work out what's alive and what's not? Collect specimens and sort them into categories. Investigate habitats and food chains. Design and make a bug hotel made up of different microhabitats to encourage a variety of creatures you can investigate.</p>	<p>and air).</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p> <p>Hatch eggs and study the life cycle of chickens. Compare and classify animals by their type e.g., reptile, bird. Find out about the term 'offspring' linked to hatching of chicks.</p> <p>Physical Health & Fitness: the risks associated with an inactive lifestyle (including obesity).</p>	<p>describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food</p> <p>Create a class allotment, grow and nurture your own plants by watering and introducing useful mini beasts, understand how food chains work and understand that energy from the Sun is passed through each link in a food chain. Sample some of the food you have grown</p>
<p>Technology: Generate ideas by drawing on their own and other people's experiences</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what</p>	<p>Technology: Generate ideas by drawing on their own and other people's experiences</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what</p>	<p>Food Tech: Generate ideas by drawing on their own and other people's experiences</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what</p>	<p>Technology: Generate ideas by drawing on their own and other people's experiences</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what</p>	<p>Food Tech: Generate ideas by drawing on their own and other people's experiences</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what</p>	<p>Technology: Generate ideas by drawing on their own and other people's experiences</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what</p>

Science and Technology Progression Matrix

they intend to design and make Identify simple design criteria Make simple drawings and label parts Begin to select tools and materials; use vocab to name and describe them Measure, cut and score with some accuracy Use hand tools safely and appropriately Assemble, join and combine materials in order to make a product Choose and use appropriate finishing techniques Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them Theme Week Tech challenge: Egg parachutes Technology: Building balloon cars Using wheels and axles,	they intend to design and make Identify simple design criteria Make simple drawings and label parts Begin to select tools and materials; use vocab to name and describe them Measure, cut and score with some accuracy Use hand tools safely and appropriately Assemble, join and combine materials in order to make a product Cut, shape and join fabric to make a simple garment. Choose and use appropriate finishing techniques Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them	they intend to design and make Identify simple design criteria Make simple drawings and label parts Follow safe procedures for food safety and hygiene Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them Food Tech: Making smoothies Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	they intend to design and make Identify simple design criteria Make simple drawings and label parts Begin to select tools and materials; use vocab to name and describe them Measure, cut and score with some accuracy Use hand tools safely and appropriately Assemble, join and combine materials in order to make a product Choose and use appropriate finishing techniques Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them Technology: Projects on a Page (Sliders and Levers) Designing, making and evaluating a moving storyboard to retell a story	they intend to design and make Identify simple design criteria Make simple drawings and label parts Follow safe procedures for food safety and hygiene Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them Food Tech: Cheese scones (duck and chick eggs compare) Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	they intend to design and make Identify simple design criteria Make simple drawings and label parts Begin to select tools and materials; use vocab to name and describe them Measure, cut and score with some accuracy Use hand tools safely and appropriately Assemble, join and combine materials in order to make a product Choose and use appropriate finishing techniques Evaluate against their design criteria Evaluate their products as they are developed, identifying strengths and possible changes they might make Talk about their ideas, saying what they like and dislike about them Technology: Projects on a Page (Sliders and Levers) Designing, making and evaluating a moving storyboard to retell a story
---	--	---	---	--	---

	<p>learning about gears Scientist Study of: Tu YouYou and The Wright Brothers</p>	<p>software and Silhouette Cameo to make brands. Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Evaluate their ideas and products against design criteria.</p>		<p>to the class Design purposeful, functional, appealing products for themselves and other users based on design criteria. Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Inventor Study of: Steve Jobs (Invention of the mobile phone)</p>		<p>Technology: Projects on a Page (Textiles - Templates and joining techniques) Designing, making and evaluating a puppet to perform a play Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Explore and evaluate a range of existing products. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. Food Tech: Make salsa Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.</p>
Year 3	<p>Animals (including humans): 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. Become a team of personal trainers for (real) clients in need of expert, health,</p>	<p>Impact of Plastic on the World Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, and cardboard for uses. Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting, and stretching Looking at impact of plastic, Blue Planet II, thinking</p>	<p>Rocks and Fossils: Compare and group together different kinds of rocks based on their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. recognise that soils are made from rocks and organic matter. Compare and group together different kinds of rocks based on their appearance and simple</p>	<p>Forces and Magnets: 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. Compare and group together a variety of everyday materials based on whether they are</p>	<p>Light: Recognise that they need light 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 an opaque object. Find patterns in the way</p>	<p>Plants: Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. Investigate the way in which water is transported within plants. Explore the part that</p>

Science and Technology Progression Matrix

<p>dietary and training advice. Develop specialised knowledge, skills and understanding in nutrition, muscles, bones and joints and even conduct your own research in order to answer your client's questions.</p> <p>Make a presentation tailored to your client's needs that will set them on the road to a healthier lifestyle.</p> <p>Physical Health & Wellbeing: Healthy Eating - healthy diet, principles of planning and preparing a range of healthy meals, characteristics of poor diet</p>	<p>about alternatives. Advantages and disadvantages of plastic, properties of plastic, recycling in Maidenhead, process of recycling plastic, 'Trash Island' and ethical dilemmas, industry's reaction to plastic pollution</p>	<p>physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter</p>	<p>attracted to a magnet and identify some magnetic materials.</p> <p>Describe magnets as having 2 poles</p> <p>Predict whether 2 magnets will attract or repel each other, depending on which poles are facing.</p> <p>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. 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 2 poles. Predict whether 2 magnets will attract or repel each other, depending on which poles are facing</p>	<p>that the size of shadows change.</p> <p>Create your own shadow puppet play using your expert knowledge and skills on light and shadows. You will make a theatre and puppets for the show in groups and conduct your own investigations on shadows, light, reflections and an introduction to refraction.</p> <p>Health and prevention: about safe and unsafe exposure to the sun, and how to reduce the risk of sun damage, including skin cancer.</p>	<p>flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p>Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. Investigate the way in which water is transported within plants. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p>
<p>Technology: Generate ideas for an item, considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of their work before starting</p>	<p>Technology: Generate ideas for an item, considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of their work before starting</p>	<p>Food Tech: Generate ideas for an item, considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of their work before starting</p>	<p>Technology: Generate ideas for an item, considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of their work before starting</p>	<p>Technology: Generate ideas for an item, considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of their work before starting</p>	<p>Technology: Generate ideas for an item, considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product.</p> <p>Plan the order of their work before starting</p>

	<p>Explore, develop, and communicate design proposals by modelling ideas</p> <p>Make drawings with labels when designing</p> <p>Select tools and techniques for making their product Measure, mark out, cut, score, and assemble components with more accuracy</p> <p>Work safely and accurately with a range of simple tools</p> <p>Think about their ideas as they make progress and be willing change things if this helps them improve their work</p> <p>Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT</p> <p>Evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Disassemble and evaluate familiar products</p> <p>Theme Week Tech challenge: cars powered by elastic band (distance & time) Technology: Moving Skeletons / Monsters</p>	<p>Explore, develop, and communicate design proposals by modelling ideas</p> <p>Make drawings with labels when designing</p> <p>Select tools and techniques for making their product Measure, mark out, cut, score, and assemble components with more accuracy</p> <p>Work safely and accurately with a range of simple tools</p> <p>Think about their ideas as they make progress and be willing change things if this helps them improve their work</p> <p>Demonstrate hygienic food preparation and storage</p> <p>Evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Disassemble and evaluate familiar products</p> <p>Vegetable soup Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>Evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Disassemble and evaluate familiar products</p> <p>Technology: Projects on a Page (Levers and Linkages) Pop up Easter cards Generate, develop, model and communicate their</p>	<p>Explore, develop, and communicate design proposals by modelling ideas</p> <p>Make drawings with labels when designing</p> <p>Select tools and techniques for making their product Measure, mark out, cut, score, and assemble components with more accuracy</p> <p>Work safely and accurately with a range of simple tools</p> <p>Think about their ideas as they make progress and be willing change things if this helps them improve their work</p> <p>Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT</p> <p>Evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Disassemble and evaluate familiar products</p> <p>Design and make a shadow puppetry theatre Use research and develop design criteria to inform the design of innovative, functional, appealing</p>	<p>Explore, develop, and communicate design proposals by modelling ideas</p> <p>Make drawings with labels when designing</p> <p>Select tools and techniques for making their product Measure, mark out, cut, score, and assemble components with more accuracy</p> <p>Work safely and accurately with a range of simple tools</p> <p>Think about their ideas as they make progress and be willing change things if this helps them improve their work</p> <p>Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT</p> <p>Evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Disassemble and evaluate familiar products</p> <p>Projects on a Page (Textiles – 2D shape to 3D)</p>
--	---	--	--	--

	<p>pneumatic systems, simple levers Study of: Jane Goodall & Charles Darwin</p> <p>design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. 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. apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Food Tech: Stained Glass Biscuits Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p>			<p>ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and prototypes. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].</p> <p>Study of: Henry Ford (Evolution of motor cars)</p>	<p>products that are fit for purpose, aimed at individuals or groups. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Food Tech: Projects on a Page (Healthy and Varied Diet) Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p>project) Making a money purse Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>
Year 4	<p>Electricity: Identify common appliances that run on electricity.</p> <p>Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches, and buzzers.</p> <p>Identify whether a lamp will light in a simple series</p>	<p>Living Things & Their Habitats: Recognise that living things can be grouped in a variety of ways.</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p>	<p>Animals including Humans: Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>Identify the different types of teeth in humans and their simple functions.</p> <p>Construct and interpret a variety of food chains,</p>	<p>States of Matter: Compare and group materials together, according to whether they are solids, liquids, or gases.</p> <p>Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in</p>	<p>Sound: Identify how sounds are made, associating some of them with something vibrating.</p> <p>Recognise that vibrations from sounds travel through a medium to the ear.</p> <p>Find patterns between the pitch of a sound and features of the object that</p>	<p>Animals including Humans: Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>Identify the different types of teeth in humans and their simple functions.</p> <p>Construct and interpret a variety of food chains,</p>

Science and Technology Progression Matrix

<p>circuit, based on whether the lamp is part of a complete loop with a battery.</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether a lamp lights in a simple series circuit.</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors.</p> <p>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.</p> <p>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.</p>	<p>Recognise that environments can change and that this can sometimes pose dangers to living things.</p> <p>Use classification keys to help group, identify and name a variety of living things. Learn about the 7 characteristics of a living thing; sort living things in several ways; make a dichotomous classification key to identify local invertebrates; make observational drawings.</p>	<p>identifying producers, predators and prey.</p> <p>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> <p>Physical Health & Wellbeing: Health and prevention - dental decay</p>	<p>degrees Celsius ($^{\circ}\text{C}$).</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p>Compare and group materials together, according to whether they are solids, liquids or gases.</p> <p>Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$).</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p>produced it.</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p> <p>Identify how sounds are made, associating some of them with something vibrating. Recognise that vibrations from sounds travel through a medium to the ear. Find patterns between the pitch of a sound and features of the object that produced it</p> <p>find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>identifying producers, predators and prey.</p> <p>Growth, nutrition for different sportspeople e.g., ballerina opposed to an Olympic rower, looking at relation to height and distance of jumping, effect of sport on our body – heart rate, perspiration etc.</p> <p>Being safe: Appropriate touch</p> <p>Physical Health & Wellbeing: Health and prevention - signs of illness</p>
<p>Technology: Generate ideas, considering the purposes for which they are designing</p>	<p>Technology: Generate ideas, considering the purposes for which they are designing</p>	<p>Food Tech: Generate ideas, considering the purposes for which they are designing</p>	<p>Food Tech: Generate ideas, considering the purposes for which they are designing</p>	<p>Technology: Generate ideas, considering the purposes for which they are designing</p>	<p>Technology: Generate ideas, considering the purposes for which they are designing</p>

	<p>Make labelled drawings from different views showing specific features</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p>Select appropriate tools and techniques for making their product</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques</p> <p>Join and combine materials and components accurately in temporary and permanent ways</p> <p>Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products carrying out appropriate tests</p> <p>Theme week tech challenge: paper aeroplane (value of money & distance)</p> <p>Technology: A motorised</p>	<p>Make labelled drawings from different views showing specific features</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p>Select appropriate tools and techniques for making their product</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques</p> <p>Join and combine materials and components accurately in temporary and permanent ways</p> <p>Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products carrying out appropriate tests</p> <p>Technology: Building a Bridge (strength, freestanding structures)</p> <p>Use research and develop</p>	<p>Make labelled drawings from different views showing specific features</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p>Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products carrying out appropriate tests</p> <p>Food Tech: Tudor biscuits Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught, and processed.</p>	<p>Make labelled drawings from different views showing specific features</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p>Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products carrying out appropriate tests</p> <p>Food Tech: Making a sandwich using salad leaves planted Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught, and processed.</p>	<p>Make labelled drawings from different views showing specific features</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p>Select appropriate tools and techniques for making their product</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques</p> <p>Join and combine materials and components accurately in temporary and permanent ways</p> <p>Sew using a range of different stitches, weave and knit</p> <p>Measure, tape or pin, cut and join fabric with some accuracy</p> <p>Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products</p>	<p>Make labelled drawings from different views showing specific features</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p>Select appropriate tools and techniques for making their product</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques</p> <p>Join and combine materials and components accurately in temporary and permanent ways</p> <p>Sew using a range of different stitches, weave and knit</p> <p>Measure, tape or pin, cut and join fabric with some accuracy</p> <p>Use simple graphical communication techniques</p> <p>Evaluate their work both during and at the end of the</p>
--	--	--	---	---	---	--

Science and Technology Progression Matrix

	<p>car frame structure, using glue gun, Tenon saw, axles, cam belt, simple electrical circuit Scientist Study of: Stephen Hawking & Helen Sharman</p>	<p>design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p>			<p>carrying out appropriate tests Technology: Making ear defenders Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups. 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. Investigate and analyse a range of existing products. Inventor Study of: Alexander Graham Bell Food Tech: Stuffed Vegetables Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught, and processed. Physical Health & Wellbeing: Healthy Eating - healthy diet, principles of planning and preparing a range of healthy meals, characteristics of poor diet</p>	<p>assignment Evaluate their products carrying out appropriate tests Technology: Textiles Design a team badge, use fabrics, sequins, beads, buttons., different stitches Silhouette Cameo Printer and Silhouette Studio to create a t-shirt transfer Generate, develop, model, and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 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. evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>
--	---	---	--	--	---	---

Year 5	<p>(POND UNIT)</p> <p>Living Things and their Habitats:</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.</p> <p>Describe the life process of reproduction in some plants and animals.</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect, and a bird. Describe the life process of reproduction in some plants (strawberry, potato, tulip) and animals (insects, amphibians, reptile and anatomy of a chicken's egg).</p>	<p>Earth and Space:</p> <p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</p> <p>Describe the movement of the Moon relative to the Earth.</p> <p>Describe the Sun, Earth and Moon as approximately spherical bodies.</p> <p>Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p> <p>Describe the movement and properties of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth.</p> <p>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> <p>Physical Health & Wellbeing: Health and Prevention - Sun safety</p>	<p>Forces:</p> <p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.</p> <p>Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.</p> <p>Explain that unsupported objects fall towards the Earth 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. Look at rotational forces. Recognise that some mechanisms, including levers, pulleys and transmission of forces in gears, allow a smaller force to have a greater effect.</p>	<p>Changing Materials:</p> <p>Compare and group together everyday materials based on their properties, including their solubility and response to magnets.</p> <p>Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.</p> <p>Use knowledge of solids, liquids, and gases to decide how mixtures might be separated, including through filtering, sieving, and evaporating.</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda</p> <p>Compare and group together everyday materials based on their properties, including their solubility and response to magnets.</p> <p>Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution. Use knowledge of solids,</p>	<p>Properties of materials:</p> <p>Compare and group together everyday materials based on their properties, including their hardness, transparency, and conductivity (electrical and thermal).</p> <p>Give reasons, based on evidence from comparative and fair tests, for the uses of everyday materials, including metals, wood and plastic.</p> <p>Compare and group together everyday materials on the basis of their properties, including their hardness, transparency, and conductivity (electrical and thermal). Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</p>	<p>Animals Including Humans:</p> <p>Describe the changes as humans develop to old age</p> <p>Describe the changes as humans develop to old age</p> <p>Physical Health & Wellbeing: Health and prevention -allergies, immunisation and vaccination.</p> <p>Health and Wellbeing: Changing adolescent body - changes 9-11</p>

				liquids, and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda		
Technology: Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas Select appropriate materials, tools and techniques Measure and mark out	Technology: Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas Select appropriate materials, tools and techniques Measure and mark out	Technology: Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas Select appropriate materials, tools and techniques Measure and mark out	Food Tech: Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas Select appropriate materials, tools and techniques Measure and mark out	Food Tech: Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas Select appropriate materials, tools and techniques Measure and mark out	Technology: Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Use results of investigations, information sources, including ICT when developing design ideas Select appropriate materials, tools and techniques Measure and mark out	

	accurately	accurately	accurately	accurately	accurately	accurately
	Use skills in using different tools and equipment safely and accurately Cut and join with accuracy to ensure a good-quality finish to the product Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others Theme week tech challenge: marble run (gravity & time) Technology: Moving Toys cams and pulleys, using glue gun, Tenon saw for cutting, joining, cutting with scissors Scientist Study of: Marianne North & Sir Isaac Newton Food Tech: Cracking potato cake Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught, and processed. Healthy Eating: the principles of planning and preparing a range of healthy meals	Use skills in using different tools and equipment safely and accurately Weigh and measure accurately (time, dry ingredients, liquids) Cut and join with accuracy to ensure a good-quality finish to the product Evaluate a product against the original design specification Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others Technology: Design Sundials Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups. Understand how key events and individuals in design and technology have helped shape the world. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Inventor Study of: Galileo Galilei (study of the sky with telescope)	Use skills in using different tools and equipment safely and accurately Cut and join with accuracy to ensure a good-quality finish to the product Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others Technology: Projects on a Page (Mechanical systems – pulleys or gears) Making moving toys. Develop a simple design specification to guide their thinking. Produce detailed lists of tools, equipment, and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. Test products with intended user and critically evaluate the quality of the design, manufacture, functionality, and fitness for purpose. Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement.	Use skills in using different tools and equipment safely and accurately Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Cut and join with accuracy to ensure a good-quality finish to the product Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others Food Tech: Spanish tortilla Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.	Use skills in using different tools and equipment safely and accurately Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Cut and join with accuracy to ensure a good-quality finish to the product Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others Food Tech: Chicken Tikka Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.	Use skills in using different tools and equipment safely and accurately Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Cut and join with accuracy to ensure a good-quality finish to the product Evaluate a product against the original design specification Evaluate it personally and seek evaluation from others Technology: Making boxing ring. 3D printing Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups. Understand how key events and individuals in design and technology have helped shape the world. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Year 6	Living Things and their habitats: Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants, and animals. Give reasons for classifying plants and animals based on specific characteristics. S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8, S1.9, S2.1, S2.2	Animals Including Humans: Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Recognise the impact of diet, exercise, drugs, and lifestyle on the way their bodies function. Describe the ways in which nutrients and water are transported within animals, including humans. Physical Health & Wellbeing: Healthy Eating - healthy diet, principles of planning and preparing a range of healthy meals, characteristics of poor diet S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8, S1.9, S3.1, S3.2, S3.3	Electricity: 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. S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8, S1.9, S6.1, S6.2, S6.3	Light: Recognise that light appears to travel in straight lines. Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes. Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8, S1.9, S5.1, S5.2, S5.3, S5.4	WeDo Logo: Explore what forces are and how they can make objects move. Create and program a robot to investigate the effects of balanced and unbalanced forces on the motion of an object. Document and present findings about forces. Explore race car features. Create and program a race car to investigate what factors would make it go faster. Document and present ways to make your car go the fastest. Explore how better sorting methods for recycling can aid in cutting back the amount of waste that is discarded. Create and program a device that will sort recyclables according to their size and shape. Present and document the solution you have developed. Pulling Investigating the effects of balanced and unbalanced forces on the movement of an object.	Animals Including Humans: Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Being safe: Appropriate touch Physical Health and Wellbeing: Health & Prevention – hygiene, bacteria and viruses, allergies, immunisation and vaccination. Health and Wellbeing: Changing adolescent body - changes 9-11, menstrual cycle S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8, S1.9, S4.1, S4.2, S4.3
--------	--	---	--	---	--	--

					<p>Speed investigating the factors that make a car go faster and predicting future motion.</p> <p>Sort to recycle Design a device that sorts objects using their physical properties, including shape and size.</p> <p>S1.1, S1.5, S1.6, S1.7, S1.8, S1.9</p>
<p>Technology: Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p>Select appropriate tools, materials, components and techniques</p> <p>Assemble components make working models</p> <p>Use tools safely and accurately</p> <p>Construct products using permanent joining</p>	<p>Technology: Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p>Select appropriate tools, materials, components and techniques</p> <p>Assemble components make working models</p> <p>Use tools safely and accurately</p> <p>Construct products using permanent joining</p>	<p>Technology: Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p>Select appropriate tools, materials, components and techniques</p> <p>Assemble components make working models</p> <p>Use tools safely and accurately</p> <p>Construct products using permanent joining</p>	<p>Food Tech: Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p>Select appropriate tools, materials, components and techniques</p> <p>Assemble components make working models</p> <p>Use tools safely and accurately</p> <p>Construct products using permanent joining</p>	<p>Technology: Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p>Select appropriate tools, materials, components and techniques</p> <p>Assemble components make working models</p> <p>Use tools safely and accurately</p> <p>Construct products using permanent joining</p>	<p>Food Tech: Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques</p> <p>Select appropriate tools, materials, components and techniques</p> <p>Assemble components make working models</p> <p>Use tools safely and accurately</p> <p>Construct products using permanent joining</p>

	techniques	techniques	techniques	techniques	techniques	techniques
	Make modifications as they go along	Make modifications as they go along	Make modifications as they go along	Make modifications as they go along	Make modifications as they go along	Make modifications as they go along
	Achieve a quality product	Achieve a quality product	Achieve a quality product	Achieve a quality product	Achieve a quality product	Achieve a quality product
	Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests	Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests	Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests	Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests	Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests	Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests
	Record their evaluations using drawings with labels	Record their evaluations using drawings with labels	Record their evaluations using drawings with labels	Record their evaluations using drawings with labels	Record their evaluations using drawings with labels	Record their evaluations using drawings with labels
	Evaluate against their original criteria and suggest ways that their product could be improved	Evaluate against their original criteria and suggest ways that their product could be improved	Evaluate against their original criteria and suggest ways that their product could be improved	Evaluate against their original criteria and suggest ways that their product could be improved	Evaluate against their original criteria and suggest ways that their product could be improved	Evaluate against their original criteria and suggest ways that their product could be improved
	Theme week tech challenge: boats (floating & weight) Technology: Fairground rides simple electrical circuits, cam belts, pulleys, glue guns, Tenon saw, joining, strengthening Scientist Study of: Marie Curie & Alessandro Volta	Making own template for biscuits Generate, develop, model, and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Food Tech: Christmas biscuits Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury	Making an electric powered car using a Crumble Board and Crumble software to program) Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers, and motors]. Apply their understanding of computing	Making bread, linked to methods used across the world (including yeast) Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed. Inventor Study of: Bill Gates (Invention of the computer)	WeDo Lego (pulleys, levers, cams, WeDo control to solve real life problems) Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Apply their understanding of computing to program, monitor and control their products.	Making pizza (fresh tomato sauce using home-grown tomatoes and a homemade scone base) Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.

		dishes using a range of cooking techniques. Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.	to program, monitor and control their products.			
--	--	--	---	--	--	--