

PROGRESSION DOCUMENT

DESIGN & TECHNOLOGY

	RECEPTION	CYCLE A YEAR 1	CYCLE B YEAR 2	CYCLE A YEAR 3	CYCLE B YEAR 4	CYCLE A YEAR 5	CYCLE B YEAR 6
Topic	<p>Marvellous Me! Junk model home</p> <p>Winter Wonderland Christmas cards</p> <p>Stomping Through Time Dinosaur fossil biscuits</p> <p>People Who Help Us Sock puppets</p> <p>On the Farm Design and create a junk model tractor</p>	<p>Abbee's Adventure Cooking and nutrition Design and make a fruit kebab</p> <p>A Toy Story Textiles Finger puppets</p> <p>Up, Up and Away Building a structure Design and make a kite</p>	<p>Tales of Nottingham Mechanisms – design and make a pop-up book</p> <p>Wonderful Weather Building a structure Weathervane</p> <p>Beside the Seaside Cooking and nutrition Design and make a seaside snack</p>	<p>Anglo Saxons and the Scots Mechanical systems Moving monsters</p> <p>Jewel in the Nile Cooking and nutrition Design and make a yoghurt dessert</p> <p>2/3 of the Earth Building a structure Designing a bridge to cross a river</p>	<p>I am a Warrior! Electrical systems A sign or torch</p> <p>The Living World Cooking and nutrition The Great Biscuit Bake Off</p> <p>The Roman Empire Textiles Design and make a money pouch</p>	<p>Extreme Earth Building a structure Design and make a volcano</p> <p>Crime and Punishment Mechanical systems Make a model of a guillotine</p> <p>Through the Decades Textiles Design and make a 60's inspired doll dress</p>	<p>The Ship of Dreams Cooking and nutrition Make and evaluate flatbreads.</p> <p>Our Changing World Mechanical systems and electrical systems Design a car of the future</p> <p>The Rainforest Textiles Design and make a soft-toy animal</p>
Substantive Concepts	<p>Design</p> <ul style="list-style-type: none"> - We have ideas for things we want to make. - We can talk about what we want our product to do. - Recognise that different people might want or need different things. <p>Making</p> <ul style="list-style-type: none"> - We use tools and materials to make things. - We need to use tools safely with adult support. - Materials can be joined or changed to help make a model. 	<p>Design</p> <ul style="list-style-type: none"> - Products are made for specific users and purposes. - Designers think about who will use a product and what it needs to do. <p>Making</p> <ul style="list-style-type: none"> - Tools help us to shape, join and assemble materials safely. - Different materials and tools are chosen for different jobs. <p>Structures</p> <ul style="list-style-type: none"> - Know that structures need to be strong, stable and stiff to be fit for purpose. - Understand that shapes and materials 	<p>Design</p> <ul style="list-style-type: none"> - Designs are planned with the user and purpose in mind. - Drawings and plans help to communicate and improve our ideas. <p>Making</p> <ul style="list-style-type: none"> - Choosing the right tools and materials affects how well a product works. - Different materials can be shaped, joined or assembled in various ways. <p>Mechanisms</p> <ul style="list-style-type: none"> - Pop-up books use paper mechanisms to create surprise and movement. - Use folding, cutting, and gluing carefully to 	<p>Design</p> <ul style="list-style-type: none"> - Successful products are designed with consideration of the user's needs, wants and the purpose. - Research and planning help make informed design choices. <p>Making</p> <ul style="list-style-type: none"> - Different materials and components have specific properties that affect how they can be used. - Accuracy and care in measuring, marking and cutting improve the quality of the final product. 	<p>Design</p> <ul style="list-style-type: none"> - Design decisions are shaped by user needs, environmental factors, and available resources. - Design criteria help guide and evaluate the success of a product. <p>Making</p> <ul style="list-style-type: none"> - Different tools and techniques are chosen for precision, efficiency, or suitability for materials. - Quality control and finishing techniques improve the outcome. <p>Mechanisms</p> <ul style="list-style-type: none"> - An electrical system is a set of components connected together 	<p>Design</p> <ul style="list-style-type: none"> - Good design involves research, innovation, and careful consideration of sustainability and user experience. - Prototypes help designers test ideas and refine their thinking before making the final product. <p>Making</p> <ul style="list-style-type: none"> - Different joining, shaping and finishing techniques are suited to specific materials and outcomes. - Precision, problem-solving and adaptation are key when constructing complex products. 	<p>Design</p> <ul style="list-style-type: none"> - High-quality design balances function, aesthetics, sustainability and user needs. - Detailed plans and prototypes allow for refinement and improvement before final construction. <p>Making</p> <ul style="list-style-type: none"> - Complex products often require combining materials, tools and techniques with accuracy and control. - Making involves managing risk, solving problems and adapting plans as needed.

	<p>Mechanisms</p> <ul style="list-style-type: none"> - Know that some things we make can move. - Understand that parts can be added to help something move or open. - Notice how everyday objects move. <p>Structures</p> <ul style="list-style-type: none"> - Know that we can build with different materials. - Begin to explore ways of making models taller, wider or more balanced. <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> - Know that we eat different types of food. - Understand that some foods are good for helping us grow and stay healthy. <p>Evaluation</p> <ul style="list-style-type: none"> - Know that we can talk about what we have made. - Understand that we can say what we like about it. - Begin to suggest something we might change or do differently next time. <p>Technology in the World</p> <ul style="list-style-type: none"> - Know that we use things every day that have been made or designed. - Understand that some products help us 	<p>can affect the strength of a structure.</p> <ul style="list-style-type: none"> - A kite is a light structure that can fly in the wind because it is strong but not heavy. <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> - Fruit kebabs are a healthy snack. - Understand that a healthy diet includes a variety of different foods. - How to peel or chop fruit safely with supervision. - How to make a kebab colourful and appealing by mixing different fruits. <p>Evaluation</p> <ul style="list-style-type: none"> - Understand that products can be improved by thinking about what worked well and what could be better. - Be able to talk about their product. - Know that testing and feedback help to make designs better. <p>Technology in the World</p> <ul style="list-style-type: none"> - Know that products are designed to solve real problems or make life easier. - Understand that products are all around us and used every day. 	<p>make mechanisms neat.</p> <ul style="list-style-type: none"> - There are different types of mechanisms in pop-up books. <p>Structures</p> <ul style="list-style-type: none"> - A weathervane must be strong and stable so it can stand upright outdoors. - The pointer spins around a pivot/axle. - A successful structure must balance strength, stability and purpose. <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> - Know that food can be sorted into groups. - Understand that we need a balanced diet to stay healthy. - How to make food look appealing - colours, patterns, shapes. - That food can be fun and healthy. <p>Evaluation</p> <ul style="list-style-type: none"> - Understand that looking at a product identifies what works and what could improve. - Know that good designers learn from testing and adapt their ideas to make them better. - Compare their product to the original design and say if it matches. 	<p>Mechanisms</p> <ul style="list-style-type: none"> - A mechanism is a set of parts that work together to make something move. - Structures (like the monster body) must be sturdy enough to support moving parts. - How to assemble levers, pivots, and linkages to make parts move. <p>Structures</p> <ul style="list-style-type: none"> - Know that frameworks can support structures and improve their stability. - The shape and design affect how strong a bridge is. - Understand that structures are designed to withstand specific forces or loads. <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> - Know that a healthy diet includes the right balance of different food groups and nutrients. - Dairy foods give us calcium for strong teeth and bones, and protein for growth. - How to combine textures and present food in an attractive way. <p>Evaluation</p> <ul style="list-style-type: none"> - Know that evaluation is ongoing. - Test products against the design criteria. 	<p>that use electricity to work.</p> <ul style="list-style-type: none"> - Know the names and functions of basic electrical components. - Know how to design and build a product fit for purpose. <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> - Biscuits can be made healthier. - Know that different ingredients have different nutritional values and functions in a meal. - Understand how to prepare and cook food safely and hygienically, using a range of techniques. <p>Evaluation</p> <ul style="list-style-type: none"> - Know that evaluating products against design criteria helps identify strengths and areas for improvement. - Understand that peer and user feedback can help refine a product to better meet its purpose. <p>Technology in the World</p> <ul style="list-style-type: none"> - Know that product design is influenced by innovation, culture, and sustainability. - Understand that designers and inventors solve problems and improve daily life through technology. 	<p>Mechanisms</p> <ul style="list-style-type: none"> - A guillotine is a drop mechanism, where gravity is used to move a sliding blade downwards. - Accuracy in measuring, cutting, and joining ensures it works properly. - Know the purpose of the different components <p>Structures</p> <ul style="list-style-type: none"> - A model volcano is built around a frame that supports the shape. - How to design a volcano with a strong frame and realistic outer shape. - Structures must be engineered to withstand forces and environmental conditions. <p>Evaluation</p> <ul style="list-style-type: none"> - Understand that evaluation is a key part of the design process. - Know that effective evaluation involves testing, analysing performance and suggesting improvements. - Identify strengths and weaknesses in their product and justify suggestions for improvement. 	<p>Mechanisms</p> <ul style="list-style-type: none"> - Cars use many mechanisms: wheels and axles, steering systems, gears, pulleys, and levers. - Design a car that combines function and creativity. - Understand how the design of systems affects efficiency, safety and usability. <p>Cooking and Nutrition</p> <ul style="list-style-type: none"> - Flatbreads are made from carbohydrates, which give us energy. - Know how to apply principles of nutrition to plan and prepare healthy, appealing food. - Understand how food choices are shaped by cost, availability and environmental impact. <p>Evaluation</p> <ul style="list-style-type: none"> - Know that products should be evaluated against intended purpose, user feedback and sustainability. - Understand that critical evaluation and reflection support continuous improvement in design. - Use subject-specific vocabulary to evaluate. <p>Technology in the World</p> <ul style="list-style-type: none"> - Know that technology shapes and is shaped by society, culture, and global challenges.
--	--	---	--	--	--	---	---

		do specific jobs (e.g. scissors for cutting). - Begin to notice how things work in the world around us.		Technology in the World - Know that products are designed to meet specific needs in everyday life. - Understand that different products are made in different ways depending on their purpose and materials.	- Evaluating existing products helps us learn what makes a design effective. Technology in the World - Know that different cultures, environments and technologies influence design. - Understand that the design and use of products have changed over time and continue to evolve.		Technology in the World - Know that technological developments are influenced by social needs, ethical considerations, and environmental impact. - Understand how products and systems have evolved to meet changing demands over time.	- Understand that designers have a responsibility to consider the environmental and ethical impact of their work.
Disciplinary & Procedural Knowledge	Design	- Begin to explore and talk about what they are making and why. - Begin to notice how things work and how parts fit or move. - Respond to simple questions about their design choices (e.g. "Why did you choose that?"). - Explore making changes and improvements as they work. - Begin to recognise that people design and make things for a reason.	- Begin to talk about the purpose of their design and who it is for. - Generate simple ideas through drawing, talking, or using models. - Make choices about materials and tools based on what they want their product to do. - Begin to explain their ideas and how they plan to make their product. - Respond to questions and suggestions to improve or develop their design.	- Develop ideas through discussion, drawing, templates, and mock-ups. - Consider the needs of the user when planning a product. - Explain what their product is for and how it will work. - Make choices about materials and components based on their properties. - Begin to evaluate and refine their ideas before starting to make.	- Generate and develop ideas through discussion, annotated sketches, and prototypes. - Use research to inform their design decisions and meet specific user needs. - Create detailed design criteria and explain how their product will work. - Select materials and components with clear reasoning linked to their function. - Plan the sequence of work and consider the practicalities of making.	- Develop design ideas using research, sketches, and prototypes to inform decisions. - Identify the needs and preferences of the intended user when planning a product. - Create detailed design criteria and begin to justify design choices. - Refine designs based on functionality, appearance, and user needs. - Plan the order of work carefully, considering materials, tools, and techniques needed.	- Use research to develop a design specification that meets a clear purpose and user need. - Generate and develop ideas through detailed sketches, annotated diagrams, and prototypes. - Justify design decisions based on functionality, sustainability, and user preferences. - Plan the design and making process in logical steps, considering constraints and available resources. - Refine ideas through peer and self-evaluation before beginning the making process.	- Create detailed design briefs and specifications based on thorough research and user feedback. - Develop innovative, functional, and appealing design ideas that consider purpose, user, and sustainability. - Use technical drawings and prototypes to explore and test design concepts. - Anticipate potential problems in the design process and propose solutions. - Critically evaluate and adapt ideas throughout the planning phase to improve outcomes.

Disciplinary & Procedural Knowledge	<p>Making</p>	<ul style="list-style-type: none"> - Choose materials and resources based on what they are making. Begin to talk about how they are making something and the steps they are following. - Explore different ways of joining and shaping materials. Make changes during the making process when something doesn't work. - Begin to understand that they can solve problems by trying different approaches. 	<ul style="list-style-type: none"> - Use a range of simple tools safely and correctly, with guidance. - Select appropriate materials and components for a given task. - Begin to measure, mark out, cut, and shape materials with increasing accuracy. - Follow a simple plan to make a product. Begin to work in sequence, recognising the steps needed to complete their model or product. 	<ul style="list-style-type: none"> - Use a wider range of tools and equipment with increasing accuracy and independence. - Measure, mark, cut, and shape materials more accurately. - Select tools and materials for specific tasks based on their properties. - Assemble, join, and combine components in a variety of ways. Follow a series of steps to complete a model or product. 	<ul style="list-style-type: none"> - Use a range of tools and equipment accurately and with increasing independence. - Select materials and components based on their suitability for the task. - Measure, mark, cut, and shape materials with improved precision. - Follow a clear sequence of steps when making, adapting where necessary. - Combine materials and components effectively using a range of joining techniques. 	<ul style="list-style-type: none"> - Use a wider range of tools and equipment with accuracy, selecting the most appropriate for the task. - Cut, shape, join, and finish materials with increasing precision and control. - Select materials and components for both functional and aesthetic purposes. Follow a step-by-step plan to complete a product, making changes where necessary. - Begin to take greater responsibility for checking quality and making refinements during the process. 	<ul style="list-style-type: none"> - Work confidently with a broad range of tools, materials, and techniques. - Select and use tools with increasing precision, control, and awareness of safety. Accurately measure, mark, cut, and assemble components to meet the design specification. - Adapt techniques and processes in response to problems or changes in the design. - Consider the quality and finish of the final product throughout the making process. 	<ul style="list-style-type: none"> - Demonstrate precision and control when using a wide range of tools, materials, and equipment. - Confidently apply advanced making techniques to achieve high-quality finishes. - Work independently to construct products that match detailed plans and specifications. - Make considered adaptations to improve functionality, aesthetics, or efficiency during the making process. - Manage time and resources effectively, evaluating progress and adjusting where necessary.
Disciplinary & Procedural Knowledge	<p>Textiles</p>	<ul style="list-style-type: none"> - Explore and handle a variety of fabrics and materials through play and creative activities. - Begin to talk about how different fabrics feel and look. - Use fabric pieces in collages or simple models. - Experiment with joining materials using glue or tape. - Begin to notice patterns, colours, and textures in fabric and use them in their creations. 	<p><u>A Toy Story</u></p> <ul style="list-style-type: none"> - Explore different fabrics and describe their textures and properties. - Cut fabric to a chosen shape using templates. - Join fabrics using a range of techniques such as gluing, stapling, or simple stitching. - Decorate fabric using simple techniques like sticking or drawing. - Talk about what they are making and who it is for. 			<p><u>The Roman Empire</u></p> <ul style="list-style-type: none"> - Use a range of stitching techniques eg running stitch and backstitch with increasing accuracy. - Understand seam allowances and apply them when joining fabric pieces. - Select fabrics based on their suitability for the intended user or purpose. - Begin to incorporate decorative techniques such as applique or simple embellishment. 	<p><u>Through the Decades</u></p> <ul style="list-style-type: none"> - Use a wider range of stitches e.g. blanket stitch to join and decorate fabric with control. - Accurately cut and shape fabric using pattern pieces, including seam allowance. - Incorporate fastenings (e.g. buttons, zips, Velcro) into textile products effectively. 	<p><u>The Rainforest</u></p> <ul style="list-style-type: none"> - Work with increasing independence to design and construct textile products that meet a detailed brief. - Assemble fabric components, considering grain, pattern alignment, and seam allowance. - Combine decorative and functional techniques to produce high-quality products. - Evaluate textile products based on durability, appearance and effectiveness of construction.

Disciplinary & Procedural Knowledge	Mechanisms	<ul style="list-style-type: none"> - Explore how things move through play and model making. - Experiment with simple moving parts such as wheels, flaps, and hinges. - Notice how adding parts can make something move, open, or change. - Begin to talk about how and why something moves. - Suggest simple ways to make things move differently or more effective 		<u>Tales of Nottingham</u> <ul style="list-style-type: none"> - Explore how simple mechanisms eg sliders, levers, wheels, and axles work. - Begin to use mechanisms to make parts move. - Begin to assemble and adjust components to improve how a mechanism works. - Talk about how a mechanism works and what it helps the product to do. 	<u>Anglo Saxons and the Scots</u> <ul style="list-style-type: none"> - Use simple mechanical systems eg levers and linkages. - Explore how movement is created and transferred through mechanical components. - Build and assemble mechanisms with increasing accuracy and understanding. - Begin to explain how a mechanism works. 	<u>I am a Warrior!</u> <ul style="list-style-type: none"> - Use more complex mechanical systems, eg gears and pulleys, to create movement. - Investigate how different mechanisms affect speed, direction, and type of motion. - Choose suitable mechanisms to achieve specific motion in a product. - Build and assemble mechanisms with improved accuracy and reliability. - Suggest ways to improve the function. 	<u>Crime and Punishment</u> <ul style="list-style-type: none"> - Explore and use cams, followers, and other components to create varied types of motion. - Design mechanisms that perform a specific function and explain how they work. - Construct mechanical systems with control and precision. - Evaluate the efficiency and reliability of their mechanism, refining as needed. 	<u>Our Changing World</u> <ul style="list-style-type: none"> - Design and build a system combining components eg cams, gears, and pulleys. - Understand how mechanism can be used to increase efficiency in a product. - Apply knowledge of motion types (rotary, linear, reciprocating) to design a product. - Construct a mechanism precisely and accurately. - Critically evaluate the effectiveness and suggest improvements based on testing and feedback.
Disciplinary & Procedural Knowledge	Structures	<ul style="list-style-type: none"> - Explore building with a range of materials and construction kits. - Begin to understand that some shapes and joins make structures stronger or more stable. - Experiment with stacking, balancing, and combining materials to build. - Talk about what makes their structure stand up or fall down. - Make changes to improve the strength or stability of their models during play. 	<u>Up, Up and Away</u> <ul style="list-style-type: none"> - Explore ways to make structures stable and able to stand on their own. - Use materials to build simple structures. - Begin to recognise how shapes and joins affect the strength of a structure. - Test their structures and talk about what worked well. - Make simple changes to improve the strength or stability of their models. 	<u>Wonderful Weather</u> <ul style="list-style-type: none"> - Build structures using a variety of materials with purpose and control. - Explore ways to strengthen and stiffen their constructions. - Begin to test and compare the effectiveness of different shapes and joins. - Use simple techniques to reinforce or improve their structures. - Discuss how and why their structure meets the intended purpose. 	<u>2/3 of the Earth</u> <ul style="list-style-type: none"> - Investigate how different shapes and materials contribute to the strength and stability of structures. - Use diagonal bracing, folds, and layering to reinforce structures. - Combine components to create rigid and durable structures. - Plan and construct frameworks that support weight or span gaps. - Evaluate the strength and suitability of their structure against design criteria. 		<u>Extreme Earth</u> <ul style="list-style-type: none"> - Accurately measure, cut, and join materials to create a precise, durable structure. - Design and construct a structure that meet detailed design criteria and constraints. - Use a variety of strengthening, stiffening, and reinforcing techniques with precision. - Evaluate structural performance, identifying weaknesses and refining design accordingly. 	
	Cooking and Nutrition	<ul style="list-style-type: none"> - Begin to recognise different types of food and where they come from. - Explore the textures, colours, and smells of a variety of foods. 	<u>Abbee's Adventure</u> <ul style="list-style-type: none"> - Name a variety of common foods and group them. - Begin to understand that we need to eat a 	<u>Beside the Seaside</u> <ul style="list-style-type: none"> - Understand that food comes from different sources, including plants and animals. - Identify the main food groups. 	<u>Jewel in the Nile</u> <ul style="list-style-type: none"> - Understand the concept of a balanced diet. - Use a wider range of food preparation skills such as peeling, 	<u>The Living World</u> <ul style="list-style-type: none"> - Identify key nutrients and their role in a healthy, balanced diet. - Follow recipes with greater independence, 		<u>The Ship of Dreams</u> <ul style="list-style-type: none"> - Understand nutrition to plan balanced meals for specific dietary requirements.

		<p>Take part in simple food preparation activities with support.</p> <ul style="list-style-type: none"> - Use tools such as knives, graters, and peelers safely with guidance. - Talk about foods they like and begin to understand that some foods help us stay healthy 	<p>range of different foods to stay healthy.</p> <ul style="list-style-type: none"> - Take part in preparing simple dishes using basic techniques such as cutting or mixing. - Use simple tools and equipment safely and hygienically with support. - Talk about the taste and texture appearance of different foods. 	<ul style="list-style-type: none"> - Prepare simple dishes using a range of techniques such as chopping and grating. - Begin to follow basic hygiene routines when handling food. - Talk about how the food tastes or could be improved. 	<p>chopping, and grating with increasing confidence.</p> <ul style="list-style-type: none"> - Understand the importance of hygiene and safety when handling food. - Begin to read and follow simple recipes, including measuring ingredients accurately. 	<p>measuring ingredients accurately.</p> <ul style="list-style-type: none"> - Use a broader range of food preparation techniques (e.g. slicing, mixing, rubbing in). - Apply basic principles of hygiene and food safety consistently when preparing food. - Make choices about ingredients based on nutritional content and intended outcome. 		<ul style="list-style-type: none"> - Prepare and present complex dishes using a range of techniques. - Apply high standards of hygiene and safety practices, including safe storage and handling of ingredients. - Analyse and compare meals based on nutritional content, cost, seasonality, and food provenance.
Disciplinary & Procedural Knowledge	Evaluation	<ul style="list-style-type: none"> - Talk about what they have made and how they made it. - Say what they like about their product or model. - Begin to recognise when something hasn't worked as they expected. - Suggest simple changes or improvements to their work. - Respond to adult questions and feedback about their creations. 	<ul style="list-style-type: none"> - Talk about what they like or would change about their product. - Begin to compare their finished product with their original plan. - Say what worked well and what could be better. - Respond to feedback from others and suggest simple improvements. - Understand that evaluating can help improve their work. 	<ul style="list-style-type: none"> - Evaluate their product against the original design criteria. - Identify what worked well and what could be improved. - Begin to suggest changes to improve function, appearance, or usability. - Compare their finished product to others and discuss similarities and differences. - Use feedback from others to help refine future ideas. 	<ul style="list-style-type: none"> - Evaluate their product throughout the design and making process. - Compare their finished product to their design criteria. - Identify strengths and areas for improvement in their own and others' work. - Suggest specific changes to improve the function or appearance of their product. - Use peer and self-evaluation to inform future designs. 	<ul style="list-style-type: none"> - Evaluate their product against the original design criteria and intended user. - Identify what is successful and what could be improved. - Begin to suggest realistic modifications based on feedback. - Compare their product to existing products. - Reflect on their design and making process and identify what they would do differently next time. 	<ul style="list-style-type: none"> - Evaluate their product throughout and at the end of the design and making process. - Use testing and feedback from others to identify strengths and weaknesses. - Justify design choices based on how well the product meets the intended purpose and user needs. - Suggest detailed, practical improvements to enhance function, durability, and aesthetic quality. 	<ul style="list-style-type: none"> - Critically evaluate their own and others' products against a detailed design specification. - Use testing, feedback, and reflection to refine and improve their product. - Justify modifications made during the design and making process. - Analyse the impact of their design choices in terms of sustainability, efficiency, and user experience.
	Technology in the World	<p>Explore and talk about everyday objects, beginning to understand that they are designed and made to help us and have a purpose.</p>	<p><u>A Toy Story</u></p> <ul style="list-style-type: none"> - Begin to explore everyday products, recognising that they are designed for specific users and purposes. <p><u>Up, Up and Away</u></p> <ul style="list-style-type: none"> - Ask questions about how a product works and what they are made from. 	<p><u>Wonderful Weather</u></p> <p>Recognise that products are made to meet needs and solve problems, and begin to explore their materials, features, and how they help in everyday life.</p>	<p><u>2/3 of the Earth</u></p> <p>Understand how designers research and use materials, technology, and user needs to create purposeful products that solve real problems.</p>	<p><u>The Roman Empire</u></p> <p>Understand how products are designed for specific users and purposes, and explore how materials, features, and cultural influences affect their effectiveness and appeal.</p>	<p><u>Through the Decades</u></p> <p>Understand how products are designed and improved to meet real-world needs, considering materials, technology, sustainability, and consumer preferences.</p>	<p><u>Our Changing World</u></p> <p>Understand how innovation, global trends, and ethical, environmental, and economic factors influence the entire lifecycle of a product and how designers respond to user needs and sustainability in a changing world.</p>

Specific Vocabulary	<p>Design plan, idea, make, product, choose</p> <p>Making cut, stick, glue, tape, join, build, fold, shape, safe, tools, scissors</p> <p>Textiles soft, rough, smooth, join, stick, glue, decorate, material</p> <p>Mechanisms move, turn, wheel, flap, open, close, push, pull, slide</p> <p>Cooking and Nutrition food, fruit, vegetable, mix, peel, chop, cut, snack</p> <p>Structures tall, wide, strong, build, fall, stack, join</p> <p>Evaluation like, change, fix, better, next time, try, test, improve</p> <p>Technology in the World tool, object, work, help, job, move, how, what, why</p>	<p>Design design, purpose, improve, materials, make, test</p> <p>Making measure, mark, shape, tool, equipment</p> <p>Textiles template, shape, fabric, thread, stitch, needle</p> <p>Cooking and Nutrition ingredients, healthy, prepare, tools, safely, hygiene, flavour,</p> <p>Structures Frame, stick, tie, strong, weak, light, heavy</p> <p>Evaluation like, dislike, same, different, works, doesn't work, change</p> <p>Technology in the World toys, machines, useful, safe, broken, fixed</p>	<p>Design criteria, function, user, template, refine</p> <p>Maing assemble, combine, accuracy, attach</p> <p>Mechanisms movement, hinge, lever, pull-tab, moving part</p> <p>Cooking and Nutrition food groups, chopping, grating, preparation</p> <p>Structures base, balance, stable, upright, rotate, pivot materials</p> <p>Evaluation useful, strong, weak, neat, messy, finished, unfinished, better, worse</p> <p>Technology in the World household, materials, shop, factory, invention, transport</p>	<p>Design prototype, durable, purpose, assemble, product</p> <p>Making precision, process, adapt, adjust</p> <p>Mechanisms pivot, joint, mechanism, crank, cam</p> <p>Cooking and Nutrition balanced diet, peeling, recipes, utensil</p> <p>Structures framework, diagonal brace, truss, compression, tension, load bearing, reinforcement</p> <p>Structures span, strength, tension. Arch, beam, truss, support, reinforce</p> <p>Evaluation improve, suitable, effective, accurate, quality, compare</p> <p>Technology in the World product, design, consumer, market, advertisement, packaging</p>	<p>Design process, function, accurate, evaluate, reliability</p> <p>Making align, process, construct, reinforce</p> <p>Textiles running stitch, backstitch, seam, applique, textile</p> <p>Mechanisms circuit, conductor, insulator, component, connection</p> <p>Cooking and Nutrition nutrients, slicing, mixing, rubbing in, nutritional content</p> <p>Evaluation function, reliable, durable, strengths, weaknesses, improvements</p> <p>Technology in the World industry, pollution, manufacturing, mass-produced, recycling, sustainability, environment,</p>	<p>Design innovative, ergonomic, refine, annotate, quality, modification</p> <p>Making refine, modification, efficiency, modify</p> <p>Textiles blanket stitch, fastenings, pattern</p> <p>Mechanisms frame, stability, linear motion, mechanism sequence,</p> <p>Structures buttress, gusset, load distribution, structural frame, triangulation, tension points, engineered structure</p> <p>Structures shell structure, stability durable, eruption mechanism, prototype</p> <p>Evaluation efficient, ergonomic refine, modify, success criteria, product testing</p> <p>Technology in the World Innovation, enterprise, fair trade, renewable, global</p>	<p>Design aesthetic, functionality, precision, consumer, evaluate critically</p> <p>Making component, construction, efficiency testing, specification</p> <p>Textiles embellishment,</p> <p>Mechanisms chassis, axle, aerodynamic, efficiency, innovation</p> <p>Cooking and Nutrition dietary requirements, safe storage, seasonality, food provenance</p> <p>Evaluation specification, functionality, precision, reliability, critically evaluate</p> <p>Technology in the World specification, sustainable development, cultural impact, ethical design, future technologies</p>
Influential Designers		Robert Sabuda	Thomas Jefferson	Isambard Kingdom Brunel	Uthen Pialor	Piet Mondrian	Giorgetto Giugiaro Elon Musk Henrik Fisker