St. Benedict's Primary School Design and Technology KNOWLEDGE AND SKILLS BUILDER

Design and Technology element from the National Curriculum – MAKE

Phase	Context for learning	Knowledge and Skills
EYFS	Reception	Skills What are the features of the wild animal being studied?
	Topic Animals Spring 1	Knowledge Some materials are better than others in creating a model that
	Big Question Are all animals wild?	looks like an animal so you must choose your materials carefully.
	Context – Selecting tools and materials to build models of animals	
	Exploring and using media and materials	
KEY	Year 1 Autumn 1 ILP Enchanted Woodlands	Skills Select and use a range of materials, beginning to explain their choices
STAGE 1	Big Question – Who lives in a woodland?	Knowledge Different materials are suitable for different purposes,
	Context - Woodland Crowns	depending on their specific properties. For example, glass is transparent, so
	Programmes of Study	it is suitable to be used for windows
	Select from and use a wide range of materials and components, including	
	construction materials, textiles and ingredients, according to their	
	characteristics.	
	Year 1 Autumn 1 ILP Enchanted Woodlands	Skills Select and use a range of materials, beginning to explain their choices
	Big Question – Who lives in a woodland?	Knowledge Different materials are suitable for different purposes,
	Context – Innovate task: Woodland Animal Mask	depending on their specific properties. For example, glass is transparent, so
	Programmes of Study	it is suitable to be used for windows
	Select from and use a wide range of materials and components, including	
	construction materials, textiles and ingredients, according to their	
	characteristics.	
	Year 1 Spring 2 ILP Beachcombers	Skills Select and use a range of materials, beginning to explain their choices
	Big Question – What are the features of a coastline?	Knowledge Different materials are suitable for different purposes,
	Context – Treasure book	depending on their specific properties. For example, glass is transparent, so
	Programmes of Study	it is suitable to be used for windows.
	Select from and use a wide range of materials and components, including	
	construction materials, textiles and ingredients, according to their	
	characteristics.	
	Year 1 Spring 2 ILP Beachcombers	Skills Select the appropriate tool for a simple practical task.
	Big Question – What are the features of a coastline?	Knowledge
	Context – Seagull finger puppets	Specific tools are used for particular purposes. For example, scissors are
	Programmes of Study	used for cutting and glue is used for sticking.

Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).	
Year 1 Spring 2 ILP Beachcombers Big Question – What are the features of a coastline? Context – Innovate task: Create a sea creature Programmes of Study Select from and use a range of tools and equipment to perform practical tasks (for events) a sufficiency of the second finishing)	Skills Select the appropriate tool for a simple practical task. Knowledge Specific tools are used for particular purposes. For example, scissors are used for cutting and glue is used for sticking.
(for example, cutting, shaping, joining and finishing). Year 1 Spring 2 ILP Beachcombers Big Question – What are the features of a coastline? Context – Innovate task: Create a 3D sea creature Programmes of Study Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.	Skills. Select and use a range of materials, beginning to explain their choice Knowledge Different materials are suitable for different purposes, depending on their specific properties. For example, glass is transparent, s it is suitable to be used for windows.
Year 1 Summer 2 ILP Paws Claws and Whiskers Big Question – Context – Looking after a mystery animal Programmes of Study Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.	Skills . Select and use a range of materials, beginning to explain their choice Knowledge Different materials are suitable for different purposes, depending on their specific properties. For example, glass is transparent, s it is suitable to be used for windows
Year 1 Summer 2 ILP Dinosaur Planet Big Question— Context - Sockasaurus rex Programmes of Study Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.	Skills . Select and use a range of materials, beginning to explain their choice Knowledge Different materials are suitable for different purposes, depending on their specific properties. For example, glass is transparent, s it is suitable to be used for windows.
Year 1 Summer 2 ILP Dinosaur Planet Big Question— Context – Bake treats for the dinosaur museum cafe Programmes of Study Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).	Skills Select the appropriate tool for a simple practical task. Knowledge Specific tools are used for particular purposes. For example, scissors are used for cutting and glue is used for sticking.
Year 2 Autumn 1 ILP Street Detectives Autumn 1 Big Question– What do you find on a street? Context – Make a model of a house or building	Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect. Knowledge

Programmes of Study Select from and use a wide range of materials and compo construction materials, textiles and ingredients, accordin characteristics.	
Year 2 Autumn 1 ILP Street Detectives Autumn 1 Big Question– What do you find on a street? Context – Make street signs to display in an outdoor play Programmes of Study Select from and use a wide range of materials and compo construction materials, textiles and ingredients, accordin characteristics	Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be
Year 2 Autumn 2 Land Ahoy ILP Big Question– How is an explorer different to a pirate Context – Making a working lighthouse Programmes of Study Select from and use a wide range of materials and compo construction materials, textiles and ingredients, accordin characteristics	or cell, wires and a bulb. The circuit must be complete for the electricity to flow.
Year 2 Autumn 2 Land Ahoy ILP Big Question– How is an explorer different to a pirate Context – Finding pirate treasure. Design and make a too Programmes of Study Select from and use a range of tools and equipment to pe (for example, cutting, shaping, joining and finishing).	bl for digging. specific purposes. For example, scissors are used for cutting paper because they have sharp, metal blades that can cut through thin materials
Year 2 Spring 2 ILP Towers, Tunnels and Turrets Big Question– What was life like inside a castle? Context – Build a model of a castle Programmes of Study Select from and use a wide range of materials and comport construction materials, textiles and ingredients, according characteristics	
Year 2 Spring 2 ILP Towers, Tunnels and TurretsBig Question– What was life like inside a castle?Context – Build towers and stacks using natural materialsProgrammes of StudySelect from and use a wide range of materials and compoconstruction materials, textiles and ingredients, accordingcharacteristics	can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint

Year 2 Spring 2 ILP Towers, Tunnels and TurretsBig Question What was life like inside a castle?Context - Making a fortress for the three little pigsProgrammes of StudySelect from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	 Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect Knowledge Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint
Year 2 Summer 2 ILP Wriggle and Crawl Big Question– Context – Make a 3D model of a mini-beast Programmes of Study Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	 Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect Knowledge Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint.
Year 2 Summer 2 ILP Wriggle and Crawl Big Question– Context – Exploring honey Programmes of Study Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).	 Skills Prepare ingredients by peeling, grating, chopping and slicing. Knowledge Some ingredients need to be prepared before they can be cooked or eaten. There are many ways to prepare ingredients: peeling skins using a vegetable peeler, such as potato skins; grating hard ingredients, such as cheese or chocolate; chopping vegetables, such as onions and peppers and slicing foods, such as bread and apples.
Year 2 Summer 1 ILP Scented Gardens Big Question- Context - Mud kitchen Programmes of Study Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).	Skills Select the appropriate tool for a task and explain their choice. Knowledge Different tools have characteristics that make them suitable for specific purposes. For example, scissors are used for cutting paper because they have sharp, metal blades that can cut through thin materials
Year 2 Summer 1 ILP Scented Gardens Big Question- Context -Scented playdough Programmes of Study Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	 Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect Knowledge Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint.
Year 2 Summer 1 ILP Scented Gardens Big Question- Context -Innovate task: Selecting ingredients to make a fragranced gift Programmes of Study	 Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect Knowledge Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint.

	Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	
	Year 2 Summer 1 ILP Scented Gardens Big Question— Context —Innovate task: Making a fragranced gift Programmes of Study Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).	 Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect Knowledge Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint.
	Year 2 Summer 1 ILP Scented Gardens Big Question- Context -Innovate task: Decorate or wrap the fragranced gift Programmes of Study Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	 Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect Knowledge Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint.
	Year 2 Summer 1 ILP Scented Gardens Big Question— Context —Innovate task: Make a flowery gift tag with a message Programmes of Study Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	 Skills Choose appropriate components and materials and suggest ways of manipulating them to achieve the desired effect Knowledge Properties of components and materials determine how they can and cannot be used. For example, plastic is shiny and strong but it can be difficult to paint.
LOWER KEY STAGE 2	 Year 3 Autumn 1 ILP Heroes and Villains Big Question – What is the difference between a hero and a villain? Context – Make a simple sock puppet of either Cruella de Vil or the dalmatian hero, Pongo. Programmes of Study 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. 	Skills Plan which materials will be needed for a task and explain why. Knowledge Materials for a specific task must be selected on the basis of their properties. These include physical properties as well as availability and cost.
	Year 3 Spring 1 ILP TremorsBig Question – What causes tremors on earth?Context – Plan a simulated demonstration of seismic and tsunami formationProgrammes of StudySelect from and use a wider range of materials and components, includingconstruction materials, textiles and ingredients, according to their functionalproperties and aesthetic qualities.	Skills Plan which materials will be needed for a task and explain why. Knowledge Materials for a specific task must be selected on the basis of their properties. These include physical properties as well as availability and cost.

Year 3 Spring 2 ILP Mighty Metals	Skills Plan which materials will be needed for a task and explain why.
Big Question – How do different forces effect metals?	Knowledge Materials for a specific task must be selected on the basis of
Context – Make mini parachutes	their properties. These include physical properties as well as availability and
Programmes of Study	cost.
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.	
Year 3 Spring 2 ILP Mighty Metals	Skills Plan which materials will be needed for a task and explain why.
Big Question – How do different forces effect metals?	Knowledge Materials for a specific task must be selected on the basis of
Context – Make a simple cart	their properties. These include physical properties as well as availability and
Programmes of Study	cost.
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.	
Year 3 Spring 2 ILP Mighty Metals	Skills Plan which materials will be needed for a task and explain why.
Big Question – How do different forces effect metals?	Knowledge Materials for a specific task must be selected on the basis of
Context – Design and make wind chimes	their properties. These include physical properties as well as availability and
Programmes of Study	cost.
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.	
Year 3 Spring 2 ILP Mighty Metals	Skills Plan which materials will be needed for a task and explain why.
Big Question – How do different forces effect metals?	Knowledge Materials for a specific task must be selected on the basis of
Context – Innovate task: Sort and select materials to use to make a friend for	their properties. These include physical properties as well as availability and
the Iron Man.	cost.
Programmes of Study	
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.	
Year 3 Spring 2 ILP Mighty Metals	Skills Plan which materials will be needed for a task and explain why.
Big Question – How do different forces effect metals?	Knowledge Materials for a specific task must be selected on the basis of
Context – Innovate task: A friend for the Iron Man. Making sure the design	their properties. These include physical properties as well as availability and
works with the materials available.	cost.
Programmes of Study	
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.	
Year 3 Spring 2 ILP Mighty Metals	Skills Use tools safely for cutting and joining materials and components.

Big Question – How do different forces effect metals?	Knowledge Specific tools can be used for cutting, such as saws. Wood can
Context – Innovate task: Constructing a friend for the Iron Man.	be joined using glue, nails, staples, or a combination of these. Safety rules
Programmes of Study	must be followed to prevent injury from sharp blades. These rules include
Select from and use a wider range of tools and equipment to perform practical	using a bench hook to keep the wood still, using a junior hacksaw with a
tasks (for example, cutting, shaping, joining and finishing), accurately.	pistol grip and working under adult supervision.
Year 3 Spring 2 ILP Mighty Metals	Skills Use tools safely for cutting and joining materials and components.
Big Question – How do different forces effect metals?	Knowledge Specific tools can be used for cutting, such as saws. Wood can
Context – Innovate task: Using some special equipment for joining metals to	be joined using glue, nails, staples, or a combination of these. Safety rules
make a friend for Iron Man	must be followed to prevent injury from sharp blades. These rules include
Programmes of Study	using a bench hook to keep the wood still, using a junior hacksaw with a
Select from and use a wider range of tools and equipment to perform practical	pistol grip and working under adult supervision.
tasks (for example, cutting, shaping, joining and finishing), accurately.	
Year 3 Summer 2 ILP Tribal Tales	Skills Plan which materials will be needed for a task and explain why.
Big Question - What is a tribe?	Knowledge Materials for a specific task must be selected on the basis of
Context –Constructing a monument: Select materials to build your monument.	their properties. These include physical properties as well as availability and
Programmes of Study	cost.
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.	
Year 4 Autumn 1 ILP I Am Warrior	Skills Choose from a range of materials, showing an understanding of their
Big Question – Why were the Romans so successful?	different characteristics.
Context – Weaponry: Design and make a shield	Knowledge Different materials and components have a range of properties,
Programmes of Study	making them suitable for different tasks. It is important to select the correct
Select from and use a wider range of materials and components, including	material or component for the specific purpose, depending on the design
construction materials, textiles and ingredients, according to their functional	criteria. Recipe ingredients have different tastes and appearances. They look
properties and aesthetic qualities.	and taste better and are cheaper when in season.
Year 4 Autumn 1 ILP I Am Warrior	Skills Choose from a range of materials, showing an understanding of their
Big Question – Why were the Romans so successful?	different characteristics.
Context – Make a plaque to commemorate taking part in the Roman invasion.	Knowledge Different materials and components have a range of properties,
Programmes of Study	making them suitable for different tasks. It is important to select the correct
Programmes of Study Select from and use a wider range of materials and components, including	making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design
Programmes of Study Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional	making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look
Programmes of Study 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.	making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
Programmes of Study 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. Year 4 Autumn 2 ILP Potions	 making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season. Skills Choose from a range of materials, showing an understanding of their
 Programmes of Study 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. Year 4 Autumn 2 ILP Potions Big Question – What is the difference between a solid, liquid and gas? 	 making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season. Skills Choose from a range of materials, showing an understanding of their different characteristics.
 Programmes of Study 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. Year 4 Autumn 2 ILP Potions Big Question – What is the difference between a solid, liquid and gas? Context – Making bath bombs 	 making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season. Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties,
 Programmes of Study 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. Year 4 Autumn 2 ILP Potions Big Question – What is the difference between a solid, liquid and gas? 	 making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season. Skills Choose from a range of materials, showing an understanding of their different characteristics.

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.	criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
Year 4 Autumn 2 ILP Potions Big Question – What is the difference between a solid, liquid and gas? Context – Making chocolate hearts Programmes of Study Select from and use a wider range of tools and equipment to perform practicates tasks (for example, cutting, shaping, joining and finishing), accurately.	Skills Select, name and use tools with adult supervision.KnowledgeKnowledgeUseful tools for cutting include scissors, craft knives, juniorhacksaws with pistol grip and bench hooks.Useful tools for joining includeglue guns.Tools should only be used with adult supervision and safety rulesmust be followed.
Year 4 Spring 1 ILP Traders and Raiders Big Question – Where did the Anglo Saxons settle and why? Context – Make sailing boats Programmes of Study 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. Year 4 Spring 1 ILP Traders and Raiders Big Question – Where did the Anglo Saxons settle and why? Context – Make a detailed design and select suitable materials to make Saxon weaponry Programmes of Study Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional	 Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season. Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
properties and aesthetic qualities. Year 4 Spring 1 ILP Traders and Raiders Big Question – Where did the Anglo Saxons settle and why? Context – Select appropriate tools and make small Anglo-Saxon charms using clay Programmes of Study 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.	 Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
Year 4 Spring 1 ILP Traders and Raiders Big Question – Where did the Anglo Saxons settle and why? Context – Create Rune Stones: Use clay tools to carve Runic alphabet into clay Programmes of Study	 Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the 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.	criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
Year 4 Spring 2 ILP Burps, Bottoms and Bile Big Question – How does the body digest food? Context – Make a model of the digestive system Programmes of Study 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.	 Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
Year 4 Spring 2 ILP Burps, Bottoms and Bile Big Question – How does the body digest food? Context – Make a wearable digestive system Programmes of Study 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. Year 4 Spring 2 ILP Burps, Bottoms and Bile Big Question – How does the body digest food? Context – Make a model of a working digestive system Programmes of Study Select from and use a wider range of materials and components, including construction — How does the body digest food? Context – Make a model of a working digestive system Programmes of Study Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic gualities	 Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season. Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
properties and aesthetic qualities. Year 4 Summer 1 ILP Misty Mountain Sierra Big Question- What are the features of a mountain? Context – Constructs a model of a mountain using papier-mâché, blocks, bricks or clay. Programmes of Study 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.	 Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the design criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
Year 4 Summer 2 ILP Blue Abyss Big Question - Context – Innovate task 3D Art Exhibition: Select materials for artwork, experiment with shape and form and make sculpture Programmes of Study	 Skills Choose from a range of materials, showing an understanding of their different characteristics. Knowledge Different materials and components have a range of properties, making them suitable for different tasks. It is important to select the correct material or component for the specific purpose, depending on the 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.	criteria. Recipe ingredients have different tastes and appearances. They look and taste better and are cheaper when in season.
UPPER KEY STAGE 2	Year 5 Autumn 1 ILP StargazersBig Question: What happens when there is no gravity?Context – Design and make a satellite, rover or shuttle for a specific mission.Programmes of StudySelect from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.	Skills Select and combine materials with precision. Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.
	Year 5 Autumn 1 ILP StargazersBig Question: What happens when there is no gravity?Context – Use stitching techniques and layering to create a moonscape textilesample.Programmes of StudySelect from and use a wider range of materials and components, includingconstruction materials, textiles and ingredients, according to their functionalproperties and aesthetic qualities.	 Skills Select and combine materials with precision. Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.
	Year 5 Autumn 1 ILP StargazersBig Question: What happens when there is no gravity?Context – Rocket launch: List materials to make a rocketProgrammes of StudySelect from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.	Skills Select and combine materials with precision. Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.
	Year 5 Autumn 1 ILP Stargazers Big Question: What happens when there is no gravity? Context – Rocket launch: Build rocket strong enough to withstand a powered launch. Programmes of Study 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.	Skills Select and combine materials with precision. Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.
	Year 5 Spring 2 ILP Beast Creator Big Question- Context – Create a mini-beast hotel Programmes of Study	Skills Select and combine materials with precision.Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.

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.	
Year 5 Spring 2 ILP Beast Creator Big Question-	Skills Select and combine materials with precision.
Context – Designing a super mini-beast: Build a 3-D model of your beast. Programmes of Study 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.	Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.
Year 5 Spring 2 ILP Beast CreatorBig Question-Context – Designing a super mini-beast: Build a 3-D model of your beast.Programmes of StudySelect from and use a wider range of tools and equipment to perform practicaltasks (for example, cutting, shaping, joining and finishing), accurately.	 Skills Name and select increasingly appropriate tools for a task and use them safely. Knowledge There are many rules for using tools safely and these may vary depending on the tools being used. For example, someone using a chisel should chip or cut with the cutting edge pointing away from their body. All tools should be cleaned and put away after use, and should not be used if they are loose or cracked.
Year 5 Spring 2 ILP Beast Creator Big Question-	Skills Select and combine materials with precision.
Context – Entomologist's ending: Create 3D sculpture of fantasy beast Programmes of Study 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.	Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.
Year 5 Summer 1 ILP PharohsBig Question-Context – Building tombs and pyramidsProgrammes of StudySelect from and use a wider range of materials and components, includingconstruction materials, textiles and ingredients, according to their functionalproperties and aesthetic qualities.	Skills Select and combine materials with precision. Knowledge Materials should be cut and combined with precision. For example, pieces of fabric could be cut with sharp scissors and sewn together using a variety of stitching techniques.
Year 5 Summer 1 ILP Pharohs Big Question- Context – Egyptian funeral preparations: Make a Canopic jar using clay to store an internal organ Programmes of Study	 Skills Name and select increasingly appropriate tools for a task and use them safely. Knowledge There are many rules for using tools safely and these may vary depending on the tools being used. For example, someone using a chisel should chip or cut with the cutting edge pointing away from their body. All tools should be

	Select from and use a wider range of tools and equipment to perform practical	cleaned and put away after use, and should not be used if they are loose or
	tasks (for example, cutting, shaping, joining and finishing), accurately.	cracked.
	Year 5 Summer 1 ILP Pharohs	Skills Select and combine materials with precision.
	Big Question-	Knowledge Materials should be cut and combined with precision. For
	Context – Egyptian funeral preparations: Plan what materials to use to build a	example, pieces of fabric could be cut with sharp scissors and sewn together
	sturdy sarcophagus	using a variety of stitching techniques.
	Programmes of Study	
	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.	
	Year 5 Summer 2 ILP Allotment	Skills Select and combine materials with precision.
	Big Question:	Knowledge Materials should be cut and combined with precision. For
	Context – Make raised beds for planting	example, pieces of fabric could be cut with sharp scissors and sewn together
	Programmes of Study	using a variety of stitching techniques.
	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.	
	Year 5 Summer 2 ILP Allotment	Skills Select and combine materials with precision.
	Big Question:	Knowledge Materials should be cut and combined with precision. For
	Context – Farmers' market: Gather together the materials, equipment and tools	example, pieces of fabric could be cut with sharp scissors and sewn together
	that you need.	using a variety of stitching techniques.
	Programmes of Study	
	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.	
	Year 5 Summer 2 ILP Allotment	Skills Select and combine materials with precision.
	Big Question:	Knowledge Materials should be cut and combined with precision. For
	Context – Make garden structures for growing plants	example, pieces of fabric could be cut with sharp scissors and sewn together
	Programmes of Study	using a variety of stitching techniques.
	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.	
	Year 6 Autumn 1 ILP A Child's War	Skills Choose the best materials for a task, showing an understanding of
	Big Question -	their working characteristics.
	Context – Make a simple child's toy using scraps of wood, card, fabric or paper.	Knowledge It is important to understand the characteristics of different
	Programmes of Study	materials to select the most appropriate material for a purpose. This might
1		include flexibility, waterproofing, texture, colour, cost and availability.

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.	
Year 6 Autumn 2 ILP Blood Heart Big Question - Context – Make a large scale model of the heart Programmes of Study 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.	 Skills Choose the best materials for a task, showing an understanding of their working characteristics. Knowledge It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability.
Year 6 Summer 1 ILP Hola Mexico Big Question - Context – Make a simple wind instrument out of junk materials Programmes of Study 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.	 Skills Choose the best materials for a task, showing an understanding of their working characteristics. Knowledge It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability.
Year 6 Summer 2 ILP Gallery Rebels Big Question - Context – Make a beautiful sketchbook or journal Programmes of Study 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.	 Skills Choose the best materials for a task, showing an understanding of their working characteristics. Knowledge It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability
Year 6 Summer 2 ILP Gallery Rebels Big Question - Context – Make a Surrealist sculpture, using different joining and cutting techniques to construct the model Programmes of Study 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.	 Skills Choose the best materials for a task, showing an understanding of their working characteristics. Knowledge It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability
Properties and destricte qualities: Year 6 Summer 2 ILP Gallery Rebels Big Question - Context – Innovate task: Creating gallery exhibits Programmes of Study	Skills Choose the best materials for a task, showing an understanding of their working characteristics.Knowledge It is important to understand the characteristics of different materials to select the most appropriate material for a purpose. This might include flexibility, waterproofing, texture, colour, cost and availability

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