	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National	Children at the expected	Cooking and nutrition: Fruit	Mechanisms: Moving	Cooking and nutrition:	Structures: Pavilions	Electrical Systems: Doodlers	Textiles: Waistcoats
Curriculum	level of development will:	and vegetables Smoothie	monsters and Ferris	Eating seasonally			
			wheels		Use research and	<ul> <li>Use research and</li> </ul>	Use research and
Pupils should be	Textiles: Bookmarks	<ul> <li>Generate, develop,</li> </ul>		<ul> <li>Understand</li> </ul>	develop design	develop design	develop design
taught to:		model and communicate	<ul> <li>Design</li> </ul>	and apply	criteria to inform	criteria to inform the	criteria to inform
J	Develop small	their ideas through	purposeful,	principles of a	the design of	design of innovative,	the design of
	motor skills so	talking, drawing,	functional,	healthy and	innovative,	functional, appealing	innovative,
	that they can	templates, mock- ups	appealing	varied diet.	functional,	products that are fit	functional,
	use a range of	and, where appropriate,	products for		appealing	for purpose, aimed at	appealing products
	tools	information and	themselves and	<ul> <li>Prepare and</li> </ul>	products that are	particular individuals	that are fit for
	competently,	communication	other users	cook variety of	fit for purpose,	or groups.	purpose, aimed at
	safely and	technology.	based on	predominantly	aimed at		particular
	confidently.		design criteria.	savoury dishes	particular	Select from and use a	individuals or
	-ELG: Fine	Select from and use a		using a range	individuals or	wider range of tools	groups.
	Motor Skills>	range of tools and	<ul> <li>Generate,</li> </ul>	of cooking	groups.	and equipment to	
	Use a range of	equipment to perform	develop, model	techniques.		perform practical	<ul> <li>Generate, develop,</li> </ul>
	small tools,	practical tasks [for	and		<ul> <li>Generate,</li> </ul>	tasks [for example,	model and
	including	example, cutting,	communicate	<ul> <li>Understand</li> </ul>	develop, model	cutting, shaping,	communicate their
	scissors, paint	shaping, joining and	their ideas	seasonality	and communicate	joining and finishing],	ideas through
	brushes and	finishing].	through talking,	and know	their ideas	accurately.	discussion,
	cutlery.	. 63	drawing,	where and	through	,	annotated
	,	Select from and use a	templates,	how a variety	discussion,	<ul> <li>Investigate and</li> </ul>	sketches, cross-
	Explore, use	wide range of materials	mock- ups and,	of ingredients	annotated	analyse a range of	sectional and
	and refine a	and components,	where	are grown,	sketches, cross-	existing products.	exploded diagrams,
	variety of	including	appropriate,	reared, caught	sectional and		prototypes, pattern
	artistic effects	construction materials,	information	and	exploded	Evaluate their ideas	pieces and
	to express	textiles and ingredients,	and	processed.	diagrams,	and products against	computer- aided
	ideas	according to their	communication		prototypes,	their own design	design.
	and feelings.	characteristics.	technology.	Structures: Castles	pattern pieces	criteria and consider	
	Return to and				and computer	the views of others to	Select from and use
	build on their	Evaluate their ideas and	Select from and	Use research	aided design.	improve their work.	a wider range of
	previous	products against design	use a range of	and develop	_		tools and
	learning,	criteria.	tools and	design criteria	<ul> <li>Select from and</li> </ul>	Apply their	equipment to
	refining ideas		equipment to	to inform the	use a wider range	understanding of how	perform practical
	and	Understand where food	perform	design of	of tools and	to strengthen, stiffen	tasks [for example,
	developing	comes from.	practical tasks	innovative,	equipment to	and reinforce	cutting, shaping,
	their ability to		[for	functional,	perform practical	more complex	joining and
	represent		example,	appealing	tasks [for	structures.	finishing],
	them.	Structures: Windmills	cutting,	products that	example, cutting,		accurately.
	ELG: Creating		shaping, joining	are fit for	shaping, joining	<ul> <li>Understand and use</li> </ul>	
	with	<ul> <li>Design purposeful,</li> </ul>	and finishing].	purpose,	and finishing],	electrical systems in	<ul> <li>Select from and use</li> </ul>
	materials>	functional,		aimed at	accurately.	their products [for	a wider range of
	Safely use and	appealing products	<ul> <li>Select from and</li> </ul>	particular		example,	materials and
	explore a	for themselves and	use a wide	individuals or	<ul> <li>Select from and</li> </ul>	series circuits	components,
	variety of	other users	range of	groups.	use a wide range	incorporating	including
	materials,	based on design	materials and		of materials_and	switches, bulbs,	construction
	tools and	criteria.	components,	<ul> <li>Generate,</li> </ul>	components,	buzzers and motors].	materials, textiles
	techniques,		including	develop,	including		and ingredients,
	experimenting	<ul> <li>Generate, develop,</li> </ul>	construction	model and	construction	Mechanical Systems: Making a	according to their
	with colour,	model and	materials,	communicate	materials, textiles	Pop-Up Book	functional
	design,	communicate their	textiles and	their ideas	and ingredients,		properties and
	texture, form	ideas through	ingredients,	through	according to their	<ul> <li>Use research and</li> </ul>	aesthetic qualities.
	and function.	talking, drawing,	according to	discussion,	characteristics.	develop design	
				annotated		criteria to inform the	

 ELG: Creating with materials> Share their creations, explaining the process they have used.

### Structures: Junk Modelling

- Develop small motor skills so that they can use a range of tools competently, safely and confidently.
- ELG: Fine Motor Skills> Use a range of small tools, including scissors, paint brushes and cutlery.
- Explore, use and refine a variety of artistic effects to express ideas and feelings.
- Return to and build on their previous learning, refining ideas and developing their ability to represent them.
- Create collaboratively, sharing ideas, resources and skills.

- templates, mockups and, where appropriate, information and communication technology.
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- Explore and evaluate a range of existing products.
- Evaluate their ideas and products against design criteria.
- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

## Textiles: Puppets

 Design purposeful, functional, appealing products their characteristics.

- Explore and evaluate a range of existing products.
- Evaluate their ideas and products against design criteria.
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
- Build structures, exploring how they can be made stronger, stiffer and more stable (Ferris Wheel).

### <u>Structures: Baby Bear's</u> <u>Chair</u>

- 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

sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-

aided design.

- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- Select and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- 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.

 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.
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

### Mechanical Systems: Making a slingshot Car

- Use research and develop design criteria to\_inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
- develop, model
  and communicate
  their ideas
  through
  discussion,
  annotated
  sketches, crosssectional and
  exploded
  diagrams,
  prototypes,
  pattern pieces
  and computer
  aided design.

Generate,

design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

- Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computeraided design.
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- 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.
- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- Understand and use mechanical systems in their products [for

- 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.

### Structure: Playgrounds

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer- aided design.
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- Select from and use a wider range of materials and

with
materials>
Safely use and
explore a
variety of
materials,
tools and
techniques,
experimenting
with colour,
design,
texture, form
and function.

ELG: Creating

 ELG: Creating with materials> Share their creations, explaining the process they have used.

### Food: Soup

- Learn new vocabulary.
- Use new vocabulary throughout the day.
- ELG: Speaking>
   Participate in
   small group,
   class and
   one-to-one
   discussions,
   offering their
   own ideas,
   using
   recently
   introduced
   vocabulary.
- Know and talk about the different factors that support their overall health and

- for themselves and other user based on design criteria.
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mockups and, where appropriate, information and communication technology.
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].
- 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.

- appropriate, information and communication technology.
- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].
- 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.
- Build structures, exploring how they can be made stronger, stiffer and more stable.

 Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

### <u>Digital World: Electronic</u> <u>Charm</u>

and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

Use research

- Generate. develop, model and communicate their ideas through discussion. annotated sketches. cross-sectional and exploded diagrams, prototypes, pattern pieces and computeraided design.
- Investigate and analyse a range of existing products.
- Evaluate their ideas and products

- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
- 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.
- Understand how key events and individuals in design and technology have helped shape the world.
- Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].

example, gears, pulleys, cams, levers and linkages].

# Cooking and nutrition: What could be healthier?

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
- Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computeraided design.
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- 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.
- Understand how key events and individuals in design and technology have helped shape the world.

- components,
  including
  construction
  materials, textiles
  and ingredients,
  according to their
  functional
  properties and
  aesthetic qualities.
- 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.
- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

### <u>Digital World: Navigating the</u> World

- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
  - Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern

wellbeing: healthy eating. ELG: Managing self> Manage their own basic hygiene and personal needs, including... understanding the importance of healthy food choices. Develop small motor skills so that they can use a range of tools competently, safely and confidently. ELG: Use a range of small tools, including scissors, paint brushes and cutlery. Explore, use and refine a variety of artistic effects to express ideas and feelings. **ELG: Creating** with materials> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Explore the natural world

around them.

- against their own design criteria and consider the views of others to improve their work.
- Understand how key events and individuals in design and technology have helped shape the world.
- Apply their understanding of computing to program, monitor and control their products.

### **Electrical Systems: Torches**

develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

Use research and

- Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer aided design.
- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

- Apply their understanding of computing to program, monitor and control their products.
- Understand and apply principles of a healthy and varied diet.
- Prepare and cook 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.

- pieces and computer- aided design.
- 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.
- Apply their understanding of computing to program, monitor and control their products.

Natural World>Explore the natural world around them, making observations and drawing pictures of animals and  Natural analyse a range of existing products.  Evaluate their ideas and products against their own design criteria and consider the views of others to							ELG: The	
World>Explore the natural world around them, making observations and drawing pictures of animals and  world>Evaluate their ideas and products against their own design consider the views of others to								
the natural world around them, making observations and drawing pictures of animals and  the natural world around  Evaluate their ideas and products against their own design criteria and consider the views of others to							World>Explore	
them, making observations and drawing pictures of animals and							the natural	
them, making observations and drawing pictures of animals and			<ul> <li>Evaluate their</li> </ul>				world around	
making observations and drawing pictures of animals and							them,	
observations and drawing criteria and pictures of animals and animals and their own design criteria and consider the views of others to							making	
and drawing pictures of consider the animals and consmals and consider the views of others to								
pictures of consider the animals and consider the views of others to								
animals and views of others to								
plants.   improve their			improve their				plants.	
work.								
Understand how			<ul> <li>Understand how</li> </ul>					
key events and								
individuals in								
design and								
technology have								
helped shape the								
world.								
			worra.					
Understand and			<ul> <li>Understand and</li> </ul>					
use electrical								
systems in their								
products [for								
example, series								
circuits								
incorporating								
switches, bulbs,								
buzzers and								
motors].								
motorsj.			motorsj.					
By the end of the year, children should be able to			)	e vear, children should be abl	By the end of th			
Cooking and nutrition					COOK			
Vocabulary     Fruit     fruit     Climate     Beef								Vocabulary
Vegetables     vegetable     Dry climate     Cross-contamination								
Safety seed Exported Diet								
Knife leaf Imported Ethical issues								
Blade root Mediterranean climate Farm								
Tool stem Nationality Healthy								
Edge smoothie Nutrients Ingredients							Edge	
Handle healthy Polar climate Method								
Chop carton Recipe Nutrients		Nutrients		Recipe		carton	Chop	
Slice design Seasonal food Packaging		Packaging		Seasonal food		design	Slice	
Cut flavour Seasons Reared		Reared				flavour		
Saucepan peel Temperate climate Recipe		Recipe		Temperate climate			Saucepan	
slice Tropical climate Research		Research		Tropical climate				
Substitute								
Supermarket								
Vegan								
Vegetarian		Vegetarian						
Welfare		Welfare						

Mechanisms							
Vocabulary			design design criteria wheel Ferris wheel pods axle axle holder frame mechanism				
				Structures			
Vocabulary	Join Stick Cut Bend Slot Scissors Measure Materials Fix	axle bridge design design criteria model net packaging structure template unstable stable strong weak	design criteria man-made natural properties structure stable shape model test	2D shapes 3D shapes Castle Design criteria Evaluate Facade Feature Flag Net Recyclable Scoring Stable Strong Structure Tab Weak	Aesthetic Cladding Design criteria Evaluation Frame structure Function Inspiration Pavilion Reinforce Stable Structure Target audience Target customer Texture Theme		Adapt Apparatus Bench hook Cladding Coping saw Design Dowel Evaluation Feedback Idea Jelutong Landscape Mark out Measure Modify Natural materials Plan view Playground Prototype Reinforce Sketch Strong Structure Tenon saw Texture User Vice Weak
Textiles							
Vocabulary	Thread Weave Pattern Sew Sewing needle Embroider Design Evaluate	decorate design fabric glue model hand puppet safety pin staple stencil template					Accurate Adapt Annotate Design Design criteria Detail Fabric Fastening Knot Properties Running-stitch Seam Sew

			Shape
			Target audience
			Target customer
			Template
			Thread
			Unique
			Waistcoat

# Digital World Vocabulary Year 3 smart wearables product design digital revolution technology analogue digital feature function digital world Micro:bit electronic products program loops initiate simulator control monitor sense template develop fasten test user CAD (computer-aided design) point of sale display badge stand Show all

Year 6
3D CAD
Application (apps)
Biodegradable
Boolean
Cardinal compass
Client
Compass
Concept
Convince
Corrode
Duplicate
Environmentally friendly
Equipment
Feature
Finite
Function
Functional
GPS tracker
If statement
Infinite
minite

Mechanical Systems – Vocabulary	Year 4
	Aesthetic
	Air resistance
	Chassis
	Design
	Design criteria
	Function
	Graphics
	Kinetic energy
	Mechanism
	Net
	Structure
	Year 5
	Aesthetic
	Computer-aided design (CAD)
	Caption
	Design

	Design brief
	Design criteria
	Exploded diagram
	Function
	Input
	Linkage
	Mechanism
	Motion
	Output
	Pivot
	Prototype
	Slider
	Structure
	Template
	Template
Electrical Systems Vocabulary	Year 4
	Battery
	Bulb
	Buzzer
	Cell
	Component
	Conductor
	Copper
	Design criteria
	Electrical item
	Electricity
	Electronic item
	Function
	Insulator
	Series circuit
	Switch
	Test
	Torch
	Wire
	Year 5
	Circuit component
	Configuration
	Current
	Develop

DIY
Investigate
Motor
Motorised
Problem solve
Product analysis
Series circuit
Stable
Target user