

<u>Design and Technology – Key Vocabualry - Progression of Core Knowledge and Skills</u>

The design and technology knowledge and skills represented in this document are not exhaustive, but rather identify the <u>core learning</u> taught at Thwaites School to ensure the National Curriculum is covered in a deep and meaningful way, preparing our children for their next step in education by creating knowledgeable, skilful, competent and confident designers and technicians.

Early Learning Goals			
Expressive Arts and Design – Creating with Materials Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.		•	nginative and Expressive ut media and materials in original ways, thinking about uses and purposes. They and feelings through design and technology, art, music, dance, role play and
	Key Voo	cabulary	
Key Stage One Vocabulary	Lower Key Stage	e Two Vocabulary	Upper Key Stage Two Vocabulary
Design design, designing, drawing, labels, model, purpose, template, user, annotated drawings, appealing, communicate, computing software, creative, design criteria, develop, function, intended user, mock-up, practical, products, purposeful Make appearance, combine, construction materials, cut, decorations, equipment, fabric, finish, join, making, mark out, materials, plan, shaping, tools, accuracy, assemble, characteristics, components, finishing techniques, hand tools, manipulate, running stitch, score, textiles Evaluate change, compare, materials, repeat, design criteria, discuss, evaluate, improve, improvements, positive, process, product, refine, stages, strengths, successes Technical Knowledge	Design annotated sketches, computer-aided functional, pattern pieces, research at exploded diagrams, generate, innovat Make fabric paint, functional properties, kits sewing technique, stages, tie-dye aest electrical components, finishing techn Evaluate alter, existing products, key events, ke analyse, technological developments Technical Knowledge cams, gears, input process, linkages, program, pulleys, stiffen, strengthen, control, electrical systems, monitor, n	esthetics, cross-sectional diagrams, tive, prototypes, specific user s, mechanical components, select, thetic qualities, digital graphics, nique, hemming, systematic order ey individuals, investigate, views	Design industry, leisure, resources, target market availability, costings, conservation, culture, enterprise Make backstitch, blanket stitch, precision, sanding, step-by-step plan seam allowance, whip stitch Evaluate competitor analysis, fitness for purpose, manufacture, quality, market Technical Knowledge monitor, incorporate Cooking and Nutrition boiling, cattle, frying, griddling, grilling, processed, protein aroma, poultry, ratios, refine, scale down, scale up, substances, substitute
axles, build, explore, materials, stiff, strong, wheels, characteristics, components, create, levers, mechanisms, sliders, stable, structure Cooking and Nutrition animals, caught, chop, farmed, food safety, grate, grown, healthy, ingredients, plants, slice, sort, weigh, design, Eatwell Guide, food groups, hazard, hygiene, juicer, originate, peel, portions, prepare, safe knives, varied diet, zest, zester	circuits, switch Cooking and Nutrition bake, balance, crush, energy, gram, he knead, mash, millilitre, oven, preparate savoury, sweet, temperature, varied cooking utensils, hygienically, menu, revariety	tion, processed, reared, recipe, diet, whisk active, balanced diet,	



Year One and Year Two – Curriculum A			
Spring Term – One	Summer Term – One	Summer Term - Two	
Making Wind Chimes	French Picnic	Making Toys	
National Curriculum Coverage	National Curriculum Coverage	National Curriculum Coverage	
I know how to design purposeful, functional, appealing products for	Design	Design	
themselves and other users based on design criteria in the context of: designing wind chimes	I know how to design purposeful, functional, appealing products for myself and other users based on design criteria in the context of:	I know how to design purposeful, functional, appealing products for myself and other users based on design criteria in the context of:	
I know how to generate, develop, model and communicate their ideas	designing a French picnic	designing toys	
through talking, drawing, templates, mock-ups and, where appropriate,	I know how to generate, develop, model and communicate my ideas	I know how to generate, develop, model and communicate my ideas	
information and communication technology in the context of:	through talking, drawing, templates, mock-ups and, where appropriate,	through talking, drawing, templates, mock-ups and, where	
designing wind chimes	information and communication technology in the context of:	appropriate, information and communication technology in the context of:	
Make	designing a French picnic	designing toys	
I know how to select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]	Make I know how to select from and use a range of tools and equipment to	Make	
in the context of:	perform practical tasks [for example, cutting, shaping, joining and finishing]	I know how to select from and use a range of tools and equipment to	
making wind chimes	in the context of:	perform practical tasks [for example, cutting, shaping, joining and finishing]	
I know how to select from and use a wide range of materials and	making a French picnic	making toys	
components, including construction materials, textiles and ingredients, according to their characteristics in the context of:	I know how to select from and use a wide range of materials and components, including construction materials, textiles and ingredients,	I know how to select from and use a wide range of materials and	
making wind chimes	according to their characteristics in the context of:	components, including construction materials, textiles and	
Evaluate	making a French picnic	ingredients, according to their characteristics	
I know how to explore and evaluate a range of existing products in the	Evaluate	making toys Evaluate	
context of:	I know how to explore and evaluate a range of existing products in the	I know how to explore and evaluate a range of existing products in the	
evaluating wind chimes	context of:	context of:	
I know how to evaluate my own ideas and products against design criteria in the context of:	evaluating French food	evaluating toys	
evaluating my own wind chimes	I know how to evaluate my ideas and products against design criteria in the context of:	I know how to evaluate my ideas and products against design criteria	
Year One Knowledge and Skills	evaluating French food, I have made	in the context of:	
Design	Cooking and nutrition	evaluating toys Technical knowledge	
I can talk about, and use, my experience of existing products to inform my	I can use the basic principles of a healthy and varied diet to prepare dishes	I know how to build structures, exploring how they can be made	
ideas	in the context of:	stronger, stiffer and more stable in the context of:	
I can design products that have a purpose with support	preparing French food	building toys	
I can explain how my products will look and work through talking and drawings	I understand where food comes from in the context of:	I know how to explore and use mechanisms [for example, levers,	
I can follow simple design criteria with support	preparing French food Veer One Knowledge and Skills	sliders, wheels and axles], in my products in the context of:	
Make	Year One Knowledge and Skills Design	building toys Year One Knowledge and Skills	
I can follow a simple plan with support	I can say what foods are French in origin and remember if I have tried	Design	
I am beginning to select from a range of tools and equipment such, as	them	I can use my knowledge of toys and my own experiences of playing	
scissors, rulers, etc. with support	I can design food products for my own consumption	with toys to help generate ideas with support	



I am beginning to select from a range of materials and components according to their characteristics, such as string, sticky tape, sticky tac, etc. with support

I can use basic tools and equipment safely and appropriately with support

I can use a range of materials to create a product with support

I can use a ruler to measure string with support

I am beginning to cut materials with some accuracy with support

I am beginning to assemble, join and combine materials

I am beginning to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing products with support

I can say what I like about existing products

I can say some materials products are made from

I can talk about my design ideas and what I am making with support

I can identify what I like and what could be better about my own design

I can say if my idea follows simple design criteria with support

I can say if I have successfully followed a simple plan

I am beginning to understand and explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Year Two Knowledge and Skills

Design

I can use my knowledge of existing products and my own experience to help generate ideas

I can design products that have a purpose

I can explain how my products will look and work through talking and simple annotated drawings

I can understand and follow simple design criteria

Make

I can follow a simple plan

I am beginning to select from a range of tools and equipment such, as scissors, rulers, etc.

I am beginning to select from a range of materials and components according to their characteristics, such as string, sticky tape, sticky tac, etc.

I can use basic tools and equipment safely and appropriately

I can use a range of materials to create a product

I can use a ruler to measure string

I can cut materials with some accuracy

I can assemble, join and combine materials

I can explain how my products will look and taste through talking I can taste test for ideas

I can understand and follow simple design criteria with support

Make

I can follow a simple recipe with support

I am beginning to select from a range of hand tools and equipment, such as graters, zesters, safe knives and juicers with support

I can select from a range of ingredients with support

I can use kitchen equipment safely with support

I can follow hygiene procedures

I can use a range of food ingredients with support

I can combine ingredients with support

I can cut, peel and grate ingredients with support

I can attempt to measure and weigh ingredients using measuring cups

Evaluate

I can explore and evaluate existing products mainly through discussions I can explain what I like about existing products

I am beginning to explore what ingredients products are made from

I can talk about what I am making

I can say what is going well with my product

I can evaluate my product

I am beginning to understand and explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Cooking and Nutrition

I can know what the word originates means

I beginning to understand that all food comes from plants or animals

I am beginning to understand that food has to be farmed, grown elsewhere (e.g. home) or caught

Year Two Knowledge and Skills

Design

I can use my knowledge of existing French food products and my own experiences of French food to help generate ideas

I can design food products that have a purpose and are aimed at an intended consumer

I can explain how my products will look and taste through talking and simple annotated drawings

I can plan and taste test ideas

I can understand and follow simple design criteria

Make

I can design products that have a purpose and are intended for young children's play with support

I can explain how my toy will look and work through talking

I can plan and test ideas using mock-ups with support

I can understand and follow simple design criteria with support

Make

I am beginning to follow a simple plan with support

I am beginning to select from a range of hand tools and equipment

I am beginning to select from a range of materials, textiles and components according to their characteristics

I am learning to use hand tools safely and appropriately with support

I can use a range of materials and components with support

I am beginning to measure and mark out with help

I am beginning to cut materials with some accuracy

I can assemble, join and combine materials and components with support

I am beginning to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I am beginning to explore and evaluate existing toys mainly through discussions

I can explain what I like about existing toys with support

I am beginning to explore what materials products are made from with support

I can talk about what I am making with support

I am starting to identify what I like about my design and what I could change

I can evaluate my products and ideas against simple design criteria with support

I am beginning to understand and explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Technical Knowledge

I am beginning to build simple structures, exploring how they can be made stronger, stiffer and more stable with support

I can talk about and start to understand the simple working characteristics of materials and components with support

I can explore and create products using mechanisms, such as levers, sliders and wheels with support

Year Two Knowledge and Skills

Design



I can to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing products mainly through discussions and comparisons

I can explain positives and things to improve for existing products

I can explore what materials products are made from

I can talk about my design ideas and what I am making

I can identify strengths and possible changes I might make to make my design better

I can evaluate my ideas against simple design criteria

I can evaluate my product against a simple plan

I understand and can explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

I can follow a simple recipe

I am beginning to select from a range of hand tools and equipment, such as graters, zesters, safe knives and juicers

I can select from a range of ingredients

I can use kitchen equipment safely

I can follow hygiene procedures and explain why it is important

I can use a range of food ingredients

I can combine ingredients

I can cut, peel and grate ingredients

I can measure and weigh ingredients using measuring cups

Evaluate

I can explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations

I can explain positives and things to improve for existing products

I can explore what ingredients products are made from

I can talk about my design ideas and what I am making

I can start to identify strengths and possible changes I might make to refine my existing design

I can evaluate my product and ideas against simple design criteria

I understand and can explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Cooking and Nutrition

I can explain where in the world food I have designed originates from I understand and can explain that all food comes from plants or animals I understand and can explain that food has to be farmed, grown elsewhere (e.g. home) or caught

I can use my knowledge of toys and my own experiences of playing with toys to help generate my ideas

I can design products that have a purpose and are intended for young children's play

I can explain how my toy will look and work through talking and simple annotated drawings

I can plan and test ideas using mock-ups

I can understand and follow simple design criteria

Make

I can follow a simple plan with support

I am beginning to select from a range of hand tools and equipment

I can select from a range of materials, textiles and components according to their characteristics

I am learning to use hand tools safely and appropriately

I can use a range of materials and components

I can measure and mark out with help

I can cut materials with some accuracy

I can assemble, join and combine materials and components

I can to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing toys mainly through discussions and comparisons $\,$

I can explain positives and things to improve for existing products

I can explore what materials products are made from

I can talk about my design ideas and what I am making

I am starting to identify strengths and possible changes I might make to refine my existing design as I work

I can evaluate my products and ideas against simple design criteria

I understand and can explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Technical Knowledge

I can build simple structures, exploring how they can be made stronger, stiffer and more stable

I can talk about and start to understand the simple working characteristics of materials and components

I can explore and create products using mechanisms, such as levers, sliders and wheels



Autumn Term - One	Spring Term – One	Summer Term - Two
Picture Frames	Animal Homes and Shelters	Vehicle Design
National Curriculum Coverage	National Curriculum Coverage	National Curriculum Coverage
Design	Design	Design
I know how to design purposeful, functional, appealing products for myself and other users based on design criteria in the context of:	I know how to design purposeful, functional, appealing products for themselves and other users based on design criteria in the context of:	I know how to design purposeful, functional, appealing products for themselves and other users based on design criteria in the context of:
designing picture frames	designing animal homes and shelters	designing a vehicle
I know how to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology in the context of:	I know how to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology in the context of:	I know how to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology in the context of:
designing picture frames	designing animal homes and shelters	designing a vehicle
Make	Make	Make
I know how to select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] in the context of:	I know how to select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] in the context of:	I know how to select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] in the context of:
making picture frames	making animal homes and shelters	making a vehicle
I know how to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics in the context of:	I know how to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics in the context of:	I know how to select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics in the context of:
making picture frames	making animal homes and shelters	making a vehicle
Evaluate	Evaluate	Evaluate
I know how to explore and evaluate a range of existing products in the context of:	I know how to explore and evaluate a range of existing products in the context of:	I know how to explore and evaluate a range of existing products in the context of:
evaluating picture frames	evaluating animal homes and shelters	evaluating a vehicle
I know how to evaluate my ideas and products against design criteria in the context of:	I know how to evaluate their ideas and products against design criteria in the context of:	I know how to evaluate their ideas and products against design criteria in the context of:
evaluating picture frames	evaluating animal homes and shelters	evaluating a vehicle
Technical knowledge	Technical knowledge	Technical knowledge
I know how to build structures, exploring how they can be made stronger, stiffer and more stable in the context of:	I know how to build structures, exploring how they can be made stronger, stiffer and more stable in the context of:	I know how to build structures, exploring how they can be made stronger, stiffer and more stable in the context of:
making picture frames	making animal homes and shelters	making a vehicle
Year One Knowledge and Skills Design	I know how to explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products in the context of:	I know how to explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products in the context of:
I can use my knowledge of existing picture frames to help generate	making animal homes and shelters	making a vehicle
their ideas with support	Year One Knowledge and Skills	Year One Knowledge and Skills
I can design a picture frame for an intended user with support	Design	Design
I can explain how my picture frame will look through talking and simple annotated drawings	I can use my experience of a farm visit to help generate ideas with support	I can use my knowledge of existing vehicles and my own experience to help generate ideas with support
I am beginning to design a picture frame using simple computing software with support	I can design products that have a purpose and are aimed at an intended animal user with support	I can design products that have a purpose and are aimed at an intended user with support



I am beginning to understand and follow simple design criteria

Make

I am beginning to follow a simple plan with support

I am beginning to select from a range of hand tools and equipment with support

I am beginning to select from a range of materials according to their characteristics with support

I am learning to use hand tools safely and appropriately with support

I can use a range of materials and components with support

I am beginning to measure and mark out with support

I can cut, shape and score materials with support

I am beginning to assemble, join and combine materials and components with support

I am beginning to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing picture frames mainly through discussion

I can explain what I like about existing picture frames

I can explore what materials products are made from with support

I can talk about my design ideas and what I am making with support

I am starting to identify what I like about my design and what I could change

I can evaluate my products and ideas against simple design criteria with support

I am beginning to understand and explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Technical Knowledge

I can build simple structures, exploring how they can be made stronger, stiffer and more stable with support

Year Two Knowledge and Skills

Design

I can use my knowledge of existing picture frames to help generate their ideas

I can design a picture frame for an intended user

I can explain how my picture frame will look and work through talking and simple annotated drawings

I can design a picture frame using simple computing software

I can understand and follow simple design criteria

Make

I can explain how my animal homes and shelters will look and work through talking and simple drawings

I can plan and test ideas with support

I am beginning to understand and follow simple design criteria

Make

I am beginning to follow a simple plan with help

I am beginning to select from a range of hand tools and equipment with support

I am beginning to select from a range of materials, textiles and components according to their characteristics

I am learning to use hand tools safely and appropriately with support

I can use a range of materials and components with support

I am beginning to measure and mark out with help

I am beginning to cut, shape and score materials with some accuracy I can assemble, join and combine materials and components with

I am beginning to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing animal homes and shelters mainly through discussion on a farm visit

I can explain what I like about existing animal homes and shelters

I can explore what materials are made from with support

I can talk about what I am making with support

I am starting to identify what I like about my design and what I could change

I can evaluate my animal homes and shelters and ideas against my simple design criteria with support

I am beginning to understand and explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Technical Knowledge

I can build simple structures, exploring how they can be made stronger, stiffer and more stable with support

I can talk about and start to understand the simple working characteristics of materials and components with support

Year Two Knowledge and Skills

Design

I can use my knowledge of existing animal homes and shelters and my own experience to help generate ideas

I can design products that have a purpose and are aimed at an intended

I can explain how my products will look and work through talking and simple annotated drawings with support

I can plan and test ideas using templates and mock-ups with support I am beginning to understand and follow simple design criteria

Make

I can follow a simple plan with support

I am beginning to select from a range of hand tools and equipment with support

I can select from a range of materials, textiles and components

I am learning to use hand tools safely and appropriately with support

I can use a range of materials and components with support

I am beginning to measure and mark out with help

I can cut, shape and score materials with support

I am beginning to assemble, join and combine materials and components

I am beginning to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations with support

Evaluate

I can explore and evaluate existing products mainly through discussions

I can explain what I like about existing vehicles

I can explore what materials products are made from with support

I can talk about what I am making with support

I am starting to identify what I like about my design and what I could change

I can evaluate my vehicle and ideas against my simple design criteria with support

I am beginning to understand and explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Technical Knowledge

I can build simple structures, exploring how they can be made stronger, stiffer and more stable with support

I can talk about and start to understand the simple working characteristics of materials and components with support

I can explore and create products using mechanisms, such as levers, sliders and wheels with support

Year Two Knowledge and Skills

Design

I can use my knowledge of existing vehicles and my own experience to help generate ideas

I can design products that have a purpose and are aimed at an intended



I can follow a simple plan with support

I am beginning to select from a range of hand tools and equipment

I am beginning to select from a range of materials according to their characteristics

I am learning to use hand tools safely and appropriately

I can use a range of materials and components

I can measure and mark out with support

I can cut, shape and score materials with some accuracy

I can assemble, join and combine materials and components

I can use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing picture frames mainly through discussions and comparisons

I can explain positives and things to improve for existing picture frames

I can explore what materials products are made from

I can talk about my design ideas and what I am making

I am starting to identify strengths and possible changes I might make to refine my existing design as I work

I can evaluate my picture frame and ideas against their simple design criteria

I understand and can explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Technical Knowledge

I can build simple structures, exploring how they can be made stronger, stiffer and more stable

animal user

I can explain how my animal homes and shelters will look and work through talking and simple annotated drawings

I can plan and test ideas using templates and mock-ups

I can understand and follow simple design criteria

Make

I can follow a simple plan with help

I am beginning to select from a range of hand tools and equipment

I can select from a range of materials, textiles and components according to their characteristics

I am learning to use hand tools safely and appropriately

I can use a range of materials and components

I can measure and mark out with help

I can cut, shape and score materials with some accuracy

I can assemble, join and combine materials and components

I am can use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing animal homes and shelters mainly through discussions and comparison on a farm visit

I can explain positives and things to improve for existing animal homes and shelters

I can explore what materials products are made from

I can talk about my design ideas and what I am making

I am starting to identify strengths and possible changes they might make to refine their existing design as I work

I can evaluate my animal homes and shelters and ideas against my simple design criteria

start to understand that the iterative process sometimes involves repeating different stages of the process

Technical Knowledge

I can build simple structures, exploring how they can be made stronger, stiffer and more stable $\,$

I can talk about and start to understand the simple working characteristics of materials and components

user

I can explain how my products will look and work through talking and simple annotated drawings

I can plan and test ideas using templates and mock-ups

I can understand and follow simple design criteria

Make

I can follow a simple plan

I am beginning to select from a range of hand tools and equipment

I can select from a range of materials, textiles and components according to their characteristics

I am learning to use hand tools safely and appropriately

I can use a range of materials and components

I can measure and mark out with help

I can cut, shape and score materials with some accuracy

I can assemble, join and combine materials and components

I am beginning to use simple finishing techniques to improve the appearance of my product, such as adding simple decorations

Evaluate

I can explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations

I can explain positives and things to improve for existing products

I can explore what materials products are made from

I can talk about my design ideas and what I am making

I am starting to identify strengths and possible changes I might make to refine my existing design as I work

I can evaluate my products and ideas against my simple design criteria

I understand and can explain that the design process sometimes involves repeating stages of the process to improve the final product (iterative)

Technical Knowledge

I can build simple structures, exploring how they can be made stronger, stiffer and more stable

I can talk about and start to understand the simple working characteristics of materials and components

I can explore and create products using mechanisms, such as levers, sliders and wheels

Year Three and Year Four – Curriculum A

Autumn Term – Two Spring Term – Two Summer Term - Two



Buzzer Toy	Irrigation System	Healthy Packed Lunch for a School Trip
National Curriculum Coverage	National Curriculum Coverage	National Curriculum Coverage
Design	Design	Design
I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:	I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:	I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:
designing buzzer toys	designing an irrigation system	designing a healthy packed lunch
I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:	I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:	I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:
designing buzzer toys	designing an irrigation system	designing a healthy packed lunch
Make	Make	Make
I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:	I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:	I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:
making buzzer toys	making an irrigation system	making a healthy packed lunch
I know how to 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 in the context of:	I know how to 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 in the context of:	I know how to 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 in the context of:
making buzzer toys	making an irrigation system	making a healthy packed lunch
Evaluate	Evaluate	Evaluate
I know how to investigate and analyse a range of existing products in the context of:	I know how to investigate and analyse a range of existing products in the context of:	I know how to investigate and analyse a range of existing products in the context of:
evaluating buzzer toys	evaluating an irrigation system	evaluating a healthy packed lunch
I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:	I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:	I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:
evaluating buzzer toys	evaluating an irrigation system	evaluating a healthy packed lunch
I understand how key events and individuals in design and technology have helped shape the world in the context of:	I understand how key events and individuals in design and technology have helped shape the world in the context of:	Cooking and Nutrition I understand and can apply the principles of a healthy and varied diet in the
evaluating buzzer toys	evaluating an irrigation system	context of:
Technical knowledge	Technical knowledge	designing and making a healthy packed lunch
I know how to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in the context of:	I know how to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in the context of:	I know how to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques in the context of:
making buzzer toys	making an irrigation system	designing and making a healthy packed lunch
I understand and can use electrical systems in my products [for example, series circuits incorporating switches, bulbs, buzzers and motors] in the	I understand and can use mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages] in the context of:	I understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed in the context of:
context of:	making an irrigation system	designing and making a healthy packed lunch
making buzzer toys	Year Three Knowledge and Skills	Year Three Knowledge and Skills



Year Three Knowledge and Skills

Design

I can identify the design features of my products that will appeal to intended customers with support

I can use my knowledge of existing buzzer toys to help generate my ideas with support

I can design an innovative and appealing buzzer toy that has a clear purpose and is aimed at older children with support

I can explain how my buzzer toy works independently

I am beginning to use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I am beginning to explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning with support

I am beginning to test ideas out through using prototypes

I can develop and follow simple design criteria with support

Make

I can carefully select from a range of tools and equipment, explaining my choices with support

I can select from a range of materials and components according to their functional properties and aesthetic qualities with support

I am beginning to understand the main stages of making

I am beginning to learn to use a range of tools and equipment safely, appropriately and accurately

I am beginning to use a wider range of materials and components, including construction materials and electrical components

I can measure and mark out to the nearest cm and millimetre with support

I am developing my ability to cut, shape and score materials with some degree of accuracy

I am developing my ability to assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product with support

Evaluate

I am beginning to explore and evaluate existing buzzer toys, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I am beginning to explore what materials buzzer toys are made from and suggest reasons for this

Design

I can identify the design features of my irrigation system that will appeal to intended customers with support

I can use my knowledge of a broad range of existing products to help generate my ideas with support

I can design innovative and appealing products that have a clear purpose and are aimed at a specific user with support

I can explain how my irrigation system works independently

I am beginning to use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I am beginning to explore different initial ideas before coming up with a final design when designing my irrigation system

I can start to explain my choice of materials and components including function and aesthetics when planning my irrigation system with support

I am beginning to test ideas out through using prototypes

I can develop and follow simple design criteria with support

Make

I can carefully select from a range of tools and equipment, explaining my choices with support

I can select from a range of materials and components according to their functional properties and aesthetic qualities with support

I am beginning to understand the main stages of making

I am beginning to learn to use a range of tools and equipment safely, appropriately and accurately

I am beginning to use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components

I can measure and mark out to the nearest cm and millimetre with support

I am beginning to develop my ability to cut, shape and score materials with some degree of accuracy

I am beginning to assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product with support

Evaluate

I am beginning to explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I am beginning to explore what materials irrigation systems are made from and suggest reasons for this

Design

I can identify the design features of my healthy packed-lunch that will appeal to intended customers with support

I can use my knowledge of a broad range of existing food products to help generate my ideas with support

I can design innovative and appealing food products that have a clear purpose and are aimed at a specific user with support

I can explain my healthy packed-lunch tastes

I am beginning to use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I am beginning to explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of ingredients when planning with support

I am beginning to taste test ideas

I am beginning to develop and follow simple design criteria

Make

I can carefully select from a range of tools and equipment, explaining my choices with support

I am beginning to understand the main stages of making

I am beginning to learn to use a range of cooking equipment safely, appropriately and accurately and learning to follow hygiene procedures with support

I can use a range of ingredients

I am beginning to think about how I can improve the appearance of a food product

Evaluate

I am beginning to explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I am beginning to explore what ingredients products are made from and suggest reasons for this

I am beginning to consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my food product against my original design criteria with support

Cooking and Nutrition

I am starting to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world I understand and can explain how to prepare and cook a variety of

redominantly savoury dishes safely and hygienically



I am beginning to consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my buzzer toy against my original design criteria with support

Technical Knowledge

I am beginning to understand the difference between functional properties and aesthetic qualities and why they are both important when designing a product

I am beginning to understand how mechanical and electrical systems have an input and output process

I am beginning to make and represent simple electrical circuits, such as a series and parallel, and components to create functional products with support

Year Four Knowledge and Skills

Design

I can identify the design features of my products that will appeal to intended customers

I can use my knowledge of existing buzzer toys to help generate my ideas

I can design an innovative and appealing buzzer toy that has a clear purpose and is aimed at older children

I can explain how particular parts of my buzzer toy work

I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I can explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning

I can test ideas out through using prototypes

I can develop and follow simple design criteria

Make

I can carefully select from a range of tools and equipment, explaining my choices with growing confidence

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can place the main stages of making in a systematic order

I am learning to use a range of tools and equipment safely, appropriately and accurately

I can use a wider range of materials and components, including construction materials and electrical components

I can measure and mark out to the nearest cm and millimetre with growing independence

I can cut, shape and score materials with some degree of

I am beginning to consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my irrigation system against my original design criteria with support

I am beginning to evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I am beginning to understand the difference between functional properties and aesthetic qualities and why they are both important when designing a product

I am beginning to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products

I am beginning to explain how mechanical systems such as levers and linkages create movement with support

I can use mechanical systems in my irrigation system with support

Year Four Knowledge and Skills

Design

I can identify the design features of my irrigation system that will appeal to intended customers

I can use my knowledge of a broad range of existing products to help generate my ideas

I can design innovative and appealing products that have a clear purpose and are aimed at a specific user

I can explain how particular parts of my irrigation system work

I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I can explore different initial ideas before coming up with a final design when designing my irrigation system

I can start to explain my choice of materials and components including function and aesthetics when planning my irrigation system

I can test ideas out through using prototypes

I can develop and follow simple design criteria

Make

I can carefully select from a range of tools and equipment, explaining my choices with growing confidence $\,$

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can place the main stages of making in a systematic order

I am learning to use a range of tools and equipment safely,

I can use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob and/or oven with support

I can use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking

I am beginning to understand that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide and be able to apply these principles when planning and cooking dishes with support

I am beginning to understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body

I can prepare ingredients using appropriate cooking utensils with support

I can measure and weigh ingredients to the nearest gram and milliliter with support

I can follow simple recipes independently

I am starting to understand that foods need certain conditions to grow

Year Four Knowledge and Skills

Design

I can identify the design features of my healthy packed-lunch that will appeal to intended customers

I can use my knowledge of a broad range of existing food products to help generate my ideas

I can design innovative and appealing food products that have a clear purpose and are aimed at a specific user

I can explain how particular parts of my healthy packed-lunch taste

I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I can explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of ingredients when planning

I can taste test ideas

I can develop and follow simple design criteria

Make

I can carefully select from a range of tools and equipment, explaining my choices with growing confidence

I can place the main stages of making in a systematic order

I am learning to use a range of cooking equipment safely, appropriately and accurately and learning to follow hygiene procedures

I can use a wider range of ingredients

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a food product

Evaluate



accuracy

I can assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product

Evaluate

I can explore and evaluate existing buzzer toys, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I can explore what materials buzzer toys are made from and suggest reasons for this

I can consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my buzzer toy against my original design criteria

Technical Knowledge

I understand and can explain that materials have both functional properties and aesthetic qualities

I understand and can demonstrate how mechanical and electrical systems have an input and output process

I can make and represent simple electrical circuits, such as a series and parallel, and components to create functional products

appropriately and accurately

I can use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components

I can measure and mark out to the nearest cm and millimetre with growing independence

I can cut, shape and score materials with some degree of accuracy

I can assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product

Evaluate

I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I can explore what materials irrigation systems are made from and suggest reasons for this

I can consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my irrigation system against my original design criteria

I can evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I understand and can explain that materials have both functional properties and aesthetic qualities

I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products

I can explain how mechanical systems such as levers and linkages create movement $\,$

I can use mechanical systems in their products

I can explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I can explore what ingredients products are made from and suggest reasons for this

I can consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve myproduct

I can evaluate my product against my original design criteria

Cooking and Nutrition

I am starting to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world

I understand and can explain how to prepare and cook a variety of predominantly savoury dishes safely and hygienically

I can use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob and/or oven with support

I can use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking

I can explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide and be able to apply these principles when planning and cooking dishes

I understand and can explain that to be active and healthy, nutritious food and drink are needed to provide energy for the body

I can prepare ingredients using appropriate cooking utensils

I can measure and weigh ingredients to the nearest gram and millilitre

I am starting to follow more complex recipes independently
I am starting to understand seasonality

Year Three and Year Four – Curriculum B

Autumn Term - One	Spring Term – One	Summer Term – One
Shadow Puppets and Cloth Puppets	Making Musical Instruments	Building Boats
National Curriculum Coverage	National Curriculum Coverage	National Curriculum Coverage
Design	Design	Design



I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:

designing shadow and cloth puppets

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing shadow and cloth puppets

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:

making shadow and cloth puppets

I know how to 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 in the context of:

making shadow and cloth puppets

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating shadow and cloth puppets

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating shadow and cloth puppets

I understand how key events and individuals in design and technology have helped shape the world in the context of:

shadow and cloth puppets

Year Three Knowledge and Skills

Design

I can identify the design features of my puppets that will appeal to intended customers with support

I can use my knowledge of a broad range of existing puppets to help generate my ideas with support

I can design innovative and appealing puppets that have a clear purpose and are aimed at a specific user with support

I can explain how my puppets work

I am beginning to use annotated sketches and cross-sectional drawings to develop and communicate my ideas $\,$

I am beginning to explore different initial ideas before coming up

I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:

designing musical instruments

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing musical instruments

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:

making musical instruments

I know how to 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 in the context of:

making musical instruments

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating musical instruments

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating musical instruments

I understand how key events and individuals in design and technology have helped shape the world in the context of:

musical instruments

Year Three Knowledge and Skills

Design

I can identify the design features of my musical instrument that will appeal to intended customers with support

I can use my knowledge of a broad range of existing musical instruments to help generate my ideas with support

I can design innovative and appealing musical instruments that have a clear purpose and are aimed at a specific user with support

I can explain how my musical instrument works

I am beginning to use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I am beginning to explore different initial ideas before coming up

I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:

designing boats

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing boats

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:

making boats

I know how to 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 in the context of:

making boats

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating boats

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating boats

I understand how key events and individuals in design and technology have helped shape the world in the context of:

building boats

Technical knowledge

I know how to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in the context of:

making boats

I understand and can use mechanical systems in my products [for example, gears, pulleys, cams, levers and linkages] in the context of:

making boats

Year Three Knowledge and Skills

Design

I can identify the design features of my boat that will appeal to intended customers with support

I can use my knowledge of a broad range of boats to help generate my



with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning with support

I am beginning to test ideas out through using prototypes

I can develop and follow simple design criteria with support

Make

I can carefully select from a range of tools and equipment, explaining my choices with support

I can select from a range of materials and components according to their functional properties and aesthetic qualities with support

I am beginning to understand the main stages of making

I am beginning to learn to use a range of tools and equipment safely, appropriately and accurately

I am beginning to use a wide range of materials and components, including textiles

I can measure and mark out to the nearest cm and millimetre with support

I can measure, cut, shape and join fabric with some accuracy to make a simple product with support

I am beginning to join textiles with an appropriate sewing technique

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming or fabric paints with support

Evaluate

I am beginning to explore and evaluate existing puppets, explaining the purpose of the puppet and whether it is designed well to meet the intended purpose

I am beginning to explore what materials puppets are made from and suggest reasons for this

I am beginning to consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my puppet against my original design criteria with support

I beginning to evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I am beginning to understand the difference between functional properties and aesthetic qualities and why they are both important when designing a product

Year Four Knowledge and Skills

Design

with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning with support

I am beginning to test ideas out through using prototypes

I can develop and follow simple design criteria with support

Make

I can carefully select from a range of tools and equipment, explaining my choices with support

I can select from a range of materials and components according to their functional properties and aesthetic qualities with support

I am beginning to understand the main stages of making

I am beginning to learn to use a range of tools and equipment safely, appropriately and accurately

I am beginning to use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components

I can measure and mark out to the nearest cm and millimetre with support

I am beginning to develop my ability to cut, shape and score materials with some degree of accuracy

I am beginning to assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tiedye, fabric paints and digital graphics with support

Evaluate

I am beginning to explore and evaluate existing musical instruments, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I am beginning to explore what materials musical instruments are made from and suggest reasons for this

I am beginning to consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my musical instrument against my original design criteria with support

I am beginning to evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I am beginning to understand the difference between functional properties and aesthetic qualities and why they are both important when

ideas with support

I can design an innovative and appealing boat that has a clear purpose with support

I can explain how my boat works

I am beginning to use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I am beginning to explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning with support

I am beginning to test ideas out through using prototypes

I can develop and follow simple design criteria with support

Make

I can carefully select from a range of tools and equipment, explaining my choices with support

I can select from a range of materials and components according to their functional properties and aesthetic qualities with support

I am beginning to understand the main stages of making

I am beginning to learn to use a range of tools and equipment safely, appropriately and accurately

I am beginning to use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components

I can measure and mark out to the nearest \mbox{cm} and millimetre with support

I am beginning to develop my ability to cut, shape and score materials with some degree of accuracy

I am beginning to assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product such as painting details with support

Evaluate

I am beginning to explore and evaluate existing boats, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I am beginning to explore what materials boats are made from and suggest reasons for this

I am beginning to consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my boat against my original design criteria with support



I can identify the design features of my puppets that will appeal to intended customers

I can use my knowledge of a broad range of existing puppets to help generate my ideas

I can design innovative and appealing puppets that have a clear purpose and are aimed at a specific user

I can explain how particular parts of my puppets work

I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I can explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning

I can test ideas out through using prototypes

I can develop and follow simple design criteria

Make

I can carefully select from a range of tools and equipment, explaining my choices with growing confidence

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can place the main stages of making in a systematic order

I am learning to use a range of tools and equipment safely, appropriately and accurately

I can use a wider range of materials and components, including textiles

I can measure and mark out to the nearest cm and millimetre with growing independence

I can demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product

I can join textiles with an appropriate sewing technique

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming or fabric paints

Evaluate

I can explore and evaluate existing puppets, explaining the purpose of the puppet and whether it is designed well to meet the intended purpose

I can explore what materials puppets are made from and suggest reasons for this

I can consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my puppet against my original design criteria

designing a product

I am beginning to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products

I am beginning to understand how mechanical and electrical systems have an input and output process

I can make and represent simple electrical circuits, such as a series and parallel, and components to create functional musical instruments with support

I am beginning to explain how mechanical systems such as levers and linkages create movement

I can use mechanical systems in my musical instrument with support

Year Four Knowledge and Skills

Design

I can identify the design features of my musical instrument that will appeal to intended customers

I can use my knowledge of a broad range of existing musical instruments to help generate my ideas

I can design innovative and appealing musical instruments that have a clear purpose and are aimed at a specific user

I can explain how particular parts of my musical instrument work

I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I can explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning

I can test ideas out through using prototypes

I can develop and follow simple design criteria

Make

I can carefully select from a range of tools and equipment, explaining my choices with growing confidence $\,$

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can place the main stages of making in a systematic order

I am learning to use a range of tools and equipment safely, appropriately and accurately

I can use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components

I can measure and mark out to the nearest cm and millimetre with growing independence

I can cut, shape and score materials with some degree of

I am beginning to evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I am beginning to understand the difference between functional properties and aesthetic qualities and why they are both important when designing a product

I am beginning to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products

I can use mechanical systems in my boat with support

Year Four Knowledge and Skills

Design

I can identify the design features of my boat that will appeal to intended customers

I can use my knowledge of a broad range of boats to help generate my ideas

I can design an innovative and appealing boat that has a clear purpose

I can explain how particular parts of my boat work

I can use annotated sketches and cross-sectional drawings to develop and communicate my ideas

I can explore different initial ideas before coming up with a final design when designing

I can start to explain my choice of materials and components including function and aesthetics when planning

I can test ideas out through using prototypes

I can develop and follow simple design criteria

Make

I can carefully select from a range of tools and equipment, explaining my choices with growing confidence

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can place the main stages of making in a systematic order

I am learning to use a range of tools and equipment safely, appropriately and accurately

I can use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components

I can measure and mark out to the nearest \mbox{cm} and millimetre with growing independence

I can cut, shape and score materials with some degree of accuracy



I can evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I understand and can explain that materials have both functional properties and aesthetic qualities

accuracy

I can assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tiedye, fabric paints and digital graphics

Evaluate

I can explore and evaluate existing musical instruments, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I can explore what materials musical instruments are made from and suggest reasons for this

I can consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve my product

I can evaluate my musical instrument against my original design criteria

I can evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I understand and can explain that materials have both functional properties and aesthetic qualities

I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products

I understand and can demonstrate how mechanical and electrical systems have an input and output process

I can make and represent simple electrical circuits, such as a series and parallel, and components to create functional musical instruments

I can explain how mechanical systems such as levers and linkages create movement

I can use mechanical systems in my musical instrument

I can assemble, join and combine material and components with some degree of accuracy

I am beginning to select and use different and appropriate finishing techniques to improve the appearance of a product such as painting details

Evaluate

I can explore and evaluate existing boats, explaining the purpose of the product and whether it is designed well to meet the intended purpose

I can explore what materials boats are made from and suggest reasons for this

I can consider my design criteria as I make progress and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve myproduct

I can evaluate my boat against my original design criteria

I can evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world

Technical Knowledge

I understand and can explain that materials have both functional properties and aesthetic qualities

I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products

I can use mechanical systems in my boat

Year Five and Year Six – Curriculum A

Autumn Term – Two	Spring Term – Two	Summer Term – One
Ancient Greek Clothing	Eggstronauts	Baking French Pastries
National Curriculum Coverage	National Curriculum Coverage	National Curriculum Coverage
Design	Design	Design
I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:	I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:	I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:
designing Ancient Greek clothing	designing a spaceship planetary landing pod	designing French pastries



I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing Ancient Greek clothing

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately in the context of:

making Ancient Greek clothing

I know how to 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 in the context of:

making Ancient Greek clothing

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating Ancient Greek clothing

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating Ancient Greek clothing

I understand how key events and individuals in design and technology have helped shape the world in the context of:

making Ancient Greek clothing

Year Five Knowledge and Skills

Design

I am developing my research of Ancient Greek and modern clothes to inform and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market

I can begin to use my knowledge of a broad range of Ancient Greek and modern clothes to help generate ideas

I can design clothes that have a clear purpose and explain why my clothes will appeal to the intended user

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas with support

I can generate a range of design ideas and communicate final designs with help

I can think realistically about resources when planning out designs

Make

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing a spaceship planetary landing pod

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:

making a spaceship planetary landing pod

I know how to 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 in the context of:

making a spaceship planetary landing pod

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating a spaceship planetary landing pod

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating a spaceship planetary landing pod

I understand how key events and individuals in design and technology have helped shape the world in the context of:

building a spaceship planetary landing pod

Technical knowledge

I know how to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in the context of:

making a spaceship planetary landing pod

Year Five Knowledge and Skills

Design

I am developing my research to inform and develop detailed design criteria to inform the design of an innovative, functional and appealing landing capsule that is fit for purpose and aimed at a target market

I can research existing space capsules to help generate ideas with help

I can design a space capsule that has a clear purpose and explain why my space capsule will appeal to the intended user

I can explain how particular parts of my space capsule work

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas with support

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing French pastries

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:

making French pastries

I know how to 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 in the context of:

making French pastries

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating French pastries

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating French pastries

I understand how key events and individuals in design and technology have helped shape the world in the context of:

making French pastries

Cooking and Nutrition

I understand and can apply the principles of a healthy and varied diet in the context of:

making French pastries

I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques in the context of:

making French pastries

I understand and can explain seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed in the context of:

making French pastries

Year Five Knowledge and Skills

Design

I am developing my research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing food products that are fit for purpose and aimed at a target market



I can plan by suggesting what to do next with help

I am developing my ability to select from a wide range of tools and equipment, explaining my choices with support

I am developing my ability to select from a range of materials and components according to their functional properties and aesthetic qualities

I can create simple step-by-step plans as a guide to making with support

I am learning to use a larger range of tools and equipment safely and appropriately with help

I can attempt to take exact measurements and mark out, to within 1 millimetre with support

I can extend the range of materials and components, including construction materials and kits, textiles, and mechanical components I use

I can demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a basic product

I am learning to join textiles using a greater variety of stitches, such as backstitch, whip stitch or blanket stitch

I am beginning to refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape

Evaluate

I can complete basic competitor analysis of other products on the market

I am developing my ability to evaluate the quality of design, manufacture and fitness for purpose of products as I design and make

I am developing my ability to evaluate my ideas and products against the original design criteria, making changes as needed

Year Six Knowledge and Skills

Design

I can research Ancient Greek and modern clothes to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market

I can use my knowledge of a broad range of Ancient Greek and modern clothes to help generate ideas

I can design clothes that have a clear purpose and indicate the design features of my clothes that will appeal to the intended user

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas

I can generate a range of design ideas and clearly communicate final designs

I can consider the availability and costings of resources when planning

I can generate a range of design ideas and clearly communicate final designs with help

I can think realistically about resources when planning out designs

Make

I can plan by suggesting what to do next with help

I am developing my ability to select from a wide range of tools and equipment, explaining my choices with support

I am developing my ability to select from a range of materials and components according to their functional properties and aesthetic qualities

I can create simple step-by-step plans as a guide to making with support

I can learn to use a range of tools and equipment safely and appropriately with help

I can attempt to take exact measurements and mark out, to within 1 millimetre with support

I can extend the range of materials and components, including construction materials and kits, textiles, and mechanical components I use

I can cut a range of materials with increasing precision and accuracy

I can shape and score materials with increasing precision and accuracy $% \left(1\right) =\left(1\right) \left(1\right) \left($

I can assemble, join and combine materials and components with increasing accuracy $% \left(1\right) =\left(1\right) \left(1\right$

I am beginning to refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape with help

Evaluate

I am developing my ability to evaluate the quality of design, manufacture and fitness for purpose of my space capsule as I design and make

I am developing my ability to evaluate my ideas and space capsule against the original design criteria, making changes as needed

Technical Knowledge

I am developing my ability to apply my understanding of how to strengthen, stiffen and reinforce structures in order to create more useful characteristics of products

I can explain how mechanical systems, such as cams, create movement and use mechanical systems in myspace capsule with help

Year Six Knowledge and Skills

Design

I can use research to inform and develop detailed design criteria to inform the design of an innovative, functional and appealing landing capsule that is fit for purpose and aimed at a target market

I can research existing space capsules to help generate ideas

I can use my knowledge of a broad range of existing food products to help generate ideas with support

I can design food products that have a clear purpose explain why my products will appeal to the intended user

I can explain how my food products taste

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas with support

I can generate a range of design ideas and clearly communicate final designs with help

I can realistically think about resources when planning out designs

Make

I can plan by suggesting what to do next with help

I am developing my ability to select from a wide range of tools and equipment, explaining my choices with support

I am developing my ability to select from a range of ingredients according to their functional properties and taste

I can create simple step-by-step plans as a guide to making with support

I can learn to use a range of equipment safely and appropriately and learn to follow hygiene procedures with help

I can attempt to take exact measurements to within 1 millimetre with support

I can use a larger range of ingredients

I can cut a range of ingredients with support

I am beginning to shape food with support

I can combine ingredients using the correct method with support

I am developing my ability to refine the finish using garnishes to improve the appearance of my product

Evaluate

I am beginning to complete competitor analysis of other food products on the market

I am developing my ability to evaluate the quality of design, manufacture and fitness for purpose of food products as I design and make

I am developing my ability to evaluate my ideas and food products against the original design criteria, making changes as needed

Cooking and Nutrition

I am beginning to understand that food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world

I am beginning to understand seasonality, how this may affect the food availability and plan recipes according to seasonality

I can explain that food is processed into ingredients that can be eaten



out designs

Make

I can independently plan by suggesting what to do next

I can select from a wide range of tools and equipment, explaining my choices with growing confidence

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can create step-by-step plans as a guide to making

I can learn to use a wider range of tools and equipment safely and appropriately

I can independently take exact measurements and mark out, to within 1 millimetre

I can use a full range of materials and components, including construction materials and kits, textiles, and mechanical components

I can demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product

I can join textiles using a greater variety of stitches, such as backstitch, whip stitch or blanket stitch

I can refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape

Evaluate

I can complete detailed competitor analysis of other products on the market

I can critically evaluate the quality of design, manufacture and fitness for purpose of products as I design and make

I can evaluate my ideas and products against the original design criteria, making changes as needed

I can design a space capsule that has a clear purpose and indicate the design features of my space capsule that will appeal to the intended user $\,$

I can explain how particular parts of my space capsule work

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas

I can generate a range of design ideas and clearly communicate final designs

I can consider the availability and costings of resources when planning out designs

Make

I can independently plan by suggesting what to do next

I can select from a wide range of tools and equipment, explaining my choices with growing confidence

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can create step-by-step plans as a guide to making

I can learn to use a range of tools and equipment safely and appropriately

I can independently take exact measurements and mark out, to within 1 millimetre $\,$

I can use a full range of materials and components, including construction materials and kits, textiles, and mechanical components

I can cut a range of materials with precision and accuracy

I can shape and score materials with precision and accuracy

I can assemble, join and combine materials and components with accuracy

I can refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape

Evaluate

I can critically evaluate the quality of design, manufacture and fitness for purpose of my space capsule as I design and make

I can evaluate my ideas and space capsule against the original design criteria, making changes as needed

Technical Knowledge

I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products

I can explain how mechanical systems, such as cams, create movement and use mechanical systems in my space capsule

or used in cooking with support

I can demonstrate how to prepare and cook a predominantly savoury dish safely and hygienically including, where appropriate, the use of a heatsource with help

I can use a range of cooking techniques, such as griddling, grilling, frying and boiling with support

I am beginning to understand that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes with help

I am starting to think about how to adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma

I am starting to think about altering methods, cooking times and/or temperatures

I can measure accurately with support and I am beginning to attempt to calculate ratios of ingredients to scale up or down from a recipe

I can follow a recipe with help

Year Six Knowledge and Skills

Design

I can use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing food products that are fit for purpose and aimed at a target market

I can use my knowledge of a broad range of existing food products to help generate ideas

I can design food products that have a clear purpose and indicate the design features of my products that will appeal to the intended user

I can explain how particular parts of my food products taste

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas

I can generate a range of design ideas and clearly communicate final designs

I can consider the availability and costings of resources when planning out designs

Make

I can independently plan by suggesting what to do next

I can select from a wide range of tools and equipment, explaining my choices with growing confidence

I can select from a range of ingredients according to their functional properties and taste

I can create step-by-step plans as a guide to making

I can learn to use a range of equipment safely and appropriately and learn to follow hygiene procedures



		IIIMAILE SE FIOL
		I can independently take exact measurements to within 1 millimetre
		I can use a full range of ingredients
		I can cut a range of ingredients with precision and accuracy
		I can shape food with precision and accuracy
		I can combine ingredients using the correct method independently
		I can refine the finish using garnishes to improve the appearance of my product
		Evaluate
		I can complete detailed competitor analysis of other food products on the market
		I can critically evaluate the quality of design, manufacture and fitness for purpose of food products as I design and make
		I can evaluate my ideas and food products against the original design criteria, making changes as needed
		Cooking and Nutrition
		I can explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world
		I can explain about seasonality, how this may affect the food availability and plan recipes according to seasonality
		I can explain that food is processed into ingredients that can be eaten or used in cooking
		I can demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heatsource
		I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling
		I can explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes
		I can adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma
		I can alter methods, cooking times and/or temperatures
		I can measure accurately and calculate ratios of ingredients to scale up or down from a recipe
		I can independently follow a recipe
Year Five and Year Six — Curriculum B		
Autumn Term – Two	Spring Term – One	Summer Term - Two
Christmas Coffee Morning	Stone Age Weapons	Computer Game Design
National Curriculum Coverage	National Curriculum Coverage	National Curriculum Coverage
		-



Design

I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:

designing food for a Christmas coffee morning

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing food for a Christmas coffee morning

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately in the context of:

making food for a Christmas coffee morning

I know how to 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 in the context of:

making food for a Christmas coffee morning

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating food for a Christmas coffee morning

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating food for a Christmas coffee morning

Cooking and Nutrition

I understand and can apply the principles of a healthy and varied diet in the context of:

making food for a Christmas coffee morning

I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques in the context of:

making food for a Christmas coffee morning

I understand and can explain seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed in the context of:

making food for a Christmas coffee morning

Year Five Knowledge and Skills

Design

I am developing my research to inform and develop detailed design

Design

I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:

designing stone age weapons

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing stone age weapons

Make

I know how to select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately in the context of:

making stone age weapons

I know how to 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 in the context of:

making stone age weapons

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating stone age weapons

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating stone age weapons

Technical knowledge

I know how to apply my understanding of how to strengthen, stiffen and reinforce more complex structures in the context of:

making stone age weapons

Year Five Knowledge and Skills

Design

I am developing my research to inform and develop detailed design criteria to inform the design of innovative and functional weapons that are fit for purpose and aimed at a target market

I can research existing weapons to help generate ideas with help

I can design weapons that have a clear purpose and explain why my weapons will appeal to the intended user

I can explain how my weapon works

I can use annotated sketches, cross-sectional drawings and exploded

Design

I know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups in the context of:

designing computer games

I know how to generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design in the context of:

designing computer games

Evaluate

I know how to investigate and analyse a range of existing products in the context of:

evaluating computer games

I know how to evaluate my ideas and products against my own design criteria and consider the views of others to improve my work in the context of:

evaluating computer games

I understand how key events and individuals in design and technology have helped shape the world in the context of:

making computer games

Year Five Knowledge and Skills

Design

I am developing my research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing computer games that are fit for purpose and aimed at a target market

I can use my knowledge of a broad range of existing computer games to help generate ideas with help

I can design computer games that have a clear purpose and explain why my computer game will appeal to the intended user

I can explain how my computer game works

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas with support

I can generate a range of design ideas and clearly communicate final designs with help

I can think realistically about costings of resources when planning out designs

Make

I can plan by suggesting what to do next with support

I can create simple step-by-step plans as a guide to making with help



criteria to inform the design of innovative, functional and appealing food products that are fit for purpose and aimed at a target market

I can use my knowledge of a broad range of existing food products to help generate ideas with support

I can design food products that have a clear purpose explain why my products will appeal to the intended user

I can explain how my food products taste

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas with support

I can generate a range of design ideas and clearly communicate final designs with help

I can realistically think about resources when planning out designs

Make

I can plan by suggesting what to do next with help

I am developing my ability to select from a wide range of tools and equipment, explaining my choices with support

I am developing my ability to select from a range of ingredients according to their functional properties and taste

I can create simple step-by-step plans as a guide to making with support

I can learn to use a range of equipment safely and appropriately and learn to follow hygiene procedures with help

I can attempt to take exact measurements to within 1 millimetre with support

I can use a larger range of ingredients

I can cut a range of ingredients with support

I am beginning to shape food with support

I can combine ingredients using the correct method with support

I am developing my ability to refine the finish using garnishes to improve the appearance of my product

Evaluate

I am beginning to complete competitor analysis of other food products on the market

I am developing my ability to evaluate the quality of design, manufacture and fitness for purpose of food products as I design and make

I am developing my ability to evaluate my ideas and food products against the original design criteria, making changes as needed

Cooking and Nutrition

I am beginning to understand that food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world
I am beginning to understand seasonality, how this may affect the food

diagrams (possibly including computer-aided design) to develop and communicate my ideas with support

I can generate a range of design ideas and clearly communicate final designs with help

I can think realistically about resources when planning out designs

Make

I can plan by suggesting what to do next with help

I am developing my ability to select from a wide range of tools and equipment, explaining my choices with support

I am developing my ability to select from a range of materials and components according to their functional properties and aesthetic qualities

I can create simple step-by-step plans as a guide to making with support

I can learn to use a range of tools and equipment safely and appropriately with help

I can attempt to take exact measurements and mark out, to within 1 millimetre with support

I can use a range of materials and components with support

I can cut a range of materials with support

I can shape materials with support

I can assemble, join and combine materials with support

I am beginning to refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape

Evaluate

I am beginning to complete detailed competitor analysis of other products on the market

I am developing my ability to evaluate the quality of design, manufacture and fitness for purpose of my weapon as I design and make

I am developing my ability to evaluate my ideas and weapons against the original design criteria, making changes as needed

Year Six Knowledge and Skills

Design

I can use research to inform and develop detailed design criteria to inform the design of innovative and functional weapons that are fit for purpose and aimed at a target market

I can use my knowledge of a broad range of existing weapons to help generate ideas

I can design weapons that have a clear purpose and indicate the design features of my weapons that will appeal to the intended user

I can explain how particular parts of my wepon work

I can use annotated sketches, cross-sectional drawings and exploded

Evaluate

I am beginning to complete competitor analysis of other computer games on the market

I am developing my ability to evaluate the quality of design, manufacture and fitness for purpose of my computer game as I design and make

I am developing my ability to evaluate my ideas and weapons against the original design criteria, making changes as needed

Year Six Knowledge and Skills

Design

I can use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing computer games that are fit for purpose and aimed at a target market

I can use my knowledge of a broad range of existing computer games to help generate ideas

I can design computer games that have a clear purpose and indicate the design features of my computer game that will appeal to the intended user

I can explain how particular parts of my computer game work

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas

I can generate a range of design ideas and clearly communicate final designs

I can consider the availability and costings of resources when planning out designs

Make

I can independently plan by suggesting what to do next

I can create step-by-step plans as a guide to making

Evaluate

I can complete detailed competitor analysis of other computer games on the market

I can critically evaluate the quality of design, manufacture and fitness for purpose of computer games as I design and make

I can evaluate my ideas and computer game against the original design criteria, making changes as needed



availability and plan recipes according to seasonality

I can explain that food is processed into ingredients that can be eaten or used in cooking with support

I can demonstrate how to prepare and cook a predominantly savoury dish safely and hygienically including, where appropriate, the use of a heatsource with help

I can use a range of cooking techniques, such as griddling, grilling, frying and boiling with support

I am beginning to understand that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes with help

I am starting to think about how to adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma

I am starting to think about altering methods, cooking times and/or temperatures

I can measure accurately with support and I am beginning to attempt to calculate ratios of ingredients to scale up or down from a recipe

I can follow a recipe with help

Year Six Knowledge and Skills

Design

I can use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing food products that are fit for purpose and aimed at a target market

I can use my knowledge of a broad range of existing food products to help generate ideas

I can design food products that have a clear purpose and indicate the design features of my products that will appeal to the intended user

I can explain how particular parts of my food products taste

I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate my ideas

I can generate a range of design ideas and clearly communicate final designs

I can consider the availability and costings of resources when planning out designs

Make

I can independently plan by suggesting what to do next

I can select from a wide range of tools and equipment, explaining my choices with growing confidence

I can select from a range of ingredients according to their functional properties and taste

I can create step-by-step plans as a guide to making

diagrams (possibly including computer-aided design) to develop and communicate my ideas

I can generate a range of design ideas and clearly communicate final designs

I can consider the availability and costings of resources when planning out designs

Make

I can independently plan by suggesting what to do next

I can select from a wide range of tools and equipment, explaining my choices with growing confidence

I can select from a range of materials and components according to their functional properties and aesthetic qualities

I can create step-by-step plans as a guide to making

I can learn to use a range of tools and equipment safely and appropriately

I can independently take exact measurements and mark out, to within 1 millimetre

I can use a full range of materials and components

I can cut a range of materials with precision and accuracy

I can shape materials with precision and accuracy

I can assemble, join and combine materials with accuracy

I can refine the finish using techniques to improve the appearance of my product, such as sanding or a more precise scissor cut after roughly cutting out a shape

Evaluate

I can complete detailed competitor analysis of other products on the market

I can critically evaluate the quality of design, manufacture and fitness for purpose of my weapon as I design and make

I can evaluate my ideas and weapons against the original design criteria, making changes as needed



I can learn to use a range of equipment safely and appropriately and learn to follow hygiene procedures

I can independently take exact measurements to within 1 millimetre

I can use a full range of ingredients

I can cut a range of ingredients with precision and accuracy

I can shape food with precision and accuracy

I can combine ingredients using the correct method independently

I can refine the finish using garnishes to improve the appearance of my product

Evaluate

I can complete detailed competitor analysis of other food products on the market

I can critically evaluate the quality of design, manufacture and fitness for purpose of food products as I design and make

I can evaluate my ideas and food products against the original design criteria, making changes as needed

Cooking and Nutrition

I can explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world

I can explain about seasonality, how this may affect the food availability and plan recipes according to seasonality

I can explain that food is processed into ingredients that can be eaten or used in cooking

I can demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heatsource

I can demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling

I can explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes

I can adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma

I can alter methods, cooking times and/or temperatures

I can measure accurately and calculate ratios of ingredients to scale up or down from a recipe $\,$

I can independently follow a recipe