Design and Technology

Progression Map

Level Expected at the End of EYFS

We have aimed to select the Early Learning Goals that link most closely to the Design and Technology National Curriculum.

For more detail about linked subject progression within the EYFS Framework, please refer to these documents.

Expressive Arts and Design (Exploring and Using Media and Materials)

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

Expressive Arts and Design (Being Imaginative)

Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.

Physical Development (Moving and Handling)

Children handle equipment and tools effectively, including pencils for writing.

Key Stage 1 National Curriculum Expectations

Design

Pupils should be taught to:

- design purposeful, functional, appealing products for themselves and other users based on design criteria;
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

Make

Pupils should be taught to:

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

Evaluate

Pupils should be taught to:

- explore and evaluate a range of existing products;
- evaluate their ideas and products against design criteria.

Technical Knowledge

Pupils should be taught to:

- build structures, exploring how they can be made stronger, stiffer and more stable;
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Cooking and Nutrition

Pupils should be taught to:

- use the basic principles of a healthy and varied diet to prepare dishes;
- understand where food comes from.

Key Stage 2 National Curriculum Expectations

Design

Pupils should be taught to:

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

Make

Pupils should be taught to:

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately;
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

Evaluate

Pupils should be taught to:

- investigate and analyse a range of existing products;
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work;
- understand how key events and individuals in design and technology have helped shape the world.

Technical Knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures;
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages];
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors];
- apply their understanding of computing to program, monitor and control their products.

Cooking and Nutrition

Pupils should be taught to:

- understand and apply the principles of a healthy and varied diet;
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques;
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

This PlanIt Progression Map has been written to support practitioners who have chosen to adopt the PlanIt Design and Technology scheme in part or in full. The curriculum progression map comprehensively shows the progression of Design and Technology skills and concepts from year 1 to year 6.

Please note, the National Curriculum for KS2 states that children should 'generate, develop, model and communicate their ideas through computer-aided design'. In most units, there will be lessons where children focus on creating designs for their products: these designs could easily be created using computer-aided design according to the software your school has access to. However, this has not been specified throughout these lessons due to the wide variety of software schools may use. To cover this National Curriculum aim, schools will need to adapt the plans as necessary.

PlanIt Design and Technology offers a coherently planned sequence of lessons to help teachers ensure they have progressively covered the knowledge, understanding and skills required in the National Curriculum. PlanIt Design and Technology aims to inspire children through a broad range of practical experiences to create innovative designs which solve real and relevant problems within a variety of different contexts. The iterative design process is fundamental and runs throughout the PlanIt units. This iterative process encourages children to identify real and relevant problems, critically evaluate existing products and then take risks and innovate when designing and creating solutions to the problems. As part of the iterative process, time is built in to reflect, evaluate and improve on prototypes using design criteria throughout to support this process. Opportunities are provided for children to evaluate key events and individuals who have helped shape the world, showing the real impact of design and technology on the wider environment and helping to inspire children to become the next generation of innovators.

Design and Technology skills and understanding are built into lessons, following an iterative process. However, this is not to say that this structure should be followed rigidly: it allows for the revision of ideas to become part of good practice and ultimately helps to build a depth to children's understanding. Through revisiting and consolidating skills, our lesson plans and resources help children build on prior knowledge alongside introducing new skills, knowledge and challenge. We suggest a specific series of lessons for each key stage, which offer structure and narrative but are by no means to be used exclusively, rather to support planning. The revision and introduction of key vocabulary is built into each lesson. This vocabulary is then included in display materials and additional resources to ensure that children are allowed opportunities to repeat and revise this knowledge. Adult guides and accurate design and technology subject knowledge are always provided within lessons to allow the teacher and adults working in those lessons to feel confident and supported with the skills and knowledge that they are teaching.

Through these lessons, we intend to inspire pupils and practitioners to develop a love of Design and Technology and see how it has helped shaped the ever-evolving technological world they live in.

The impact of using the full range of resources, including display materials, will be seen across the school with an increase in the profile of Design and Technology. The learning environment across the school will be more consistent with design and technology technical vocabulary displayed, spoken and used by all learners. Whole-school and parental engagement will be improved through the use of design and technology-specific home learning tasks and opportunities suggested in lessons and overviews for wider learning. We want to ensure that Design and Technology is loved by teachers and pupils across school, therefore encouraging them to want to continue building on this wealth of skills and understanding, now and in the future. Impact can also be measured through key questioning skills built into lessons, child-led assessment such as success criteria grids, jigsaw targets and KWL grids and summative assessments aimed at targeting next steps in learning.

Design

KS1 | LKS2 | UKS2

KS1 Design and Technology National Curriculum

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing.

They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

Children design purposeful, functional, appealing products for themselves and other users based on design criteria.

They generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

Children can:

- a use their knowledge of existing products and their own experience to help generate their ideas;
- b design products that have a purpose and are aimed at an intended user;
- c explain how their products will look and work through talking and simple annotated drawings;
- d design models using simple computing software;
- e plan and test ideas using templates and mock-ups;
- f understand and follow simple design criteria;
- g work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment.



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	(c)	c
	d	d	d	d	d	d
	e	e	e	(e)	e	e
	f	f	f	f	(f)	f
	g	g	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	(b)	b
	c	c	c	c	(c)	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	(f)	f
	g	g	g	g	(g)	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	f	f
	g	g	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	(d)	d	d	d	d
	e	e	(e)	e	e	e
	f	f	f	f	f	f
	g	(g)	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	(a)	a	a	a
	b	b	(b)	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	(f)	f	f	f
	g	g	(g)	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	(a)	a
	b	b	b	b	(b)	b
	c	c	c	c	(c)	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	(f)	f
	g	g	g	g	(g)	g

Make

KS1 | LKS2 | UKS2

KS1 Design and Technology National Curriculum

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of making.

Children select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].

They select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Children can:

Planning

a with support, follow a simple plan or recipe;

b begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer;

c select from a range of materials, textiles and components according to their characteristics;

Practical skills and techniques

d learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures;

e use a range of materials and components, including textiles and food ingredients;

f with help, measure and mark out;

g cut, shape and score materials with some accuracy;

h assemble, join and combine materials, components or ingredients;

i demonstrate how to cut, shape and join fabric to make a simple product;

j manipulate fabrics in simple ways to create the desired effect;

k use a basic running stitch;

l cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups;

m begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.

Make

KS1 | LKS2 | UKS2



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	(b)	(b)	b	(b)
c	(c)	c	c	c	(c)
d	d	d	d	d	(d)
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	(g)
h	h	(h)	h	h	(h)
i	i	(i)	i	i	(i)
j	(j)	j	j	j	j
k	k	(k)	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	a	a	(a)	(a)
b	b	b	b	b	(b)
c	c	c	c	(c)	c
d	d	d	(d)	d	(d)
e	e	e	e	e	(e)
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	(h)
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	(l)	l	(l)
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	(a)	a	(a)	(a)
b	b	b	b	(b)	(b)
c	c	c	c	c	c
d	d	(d)	d	(d)	(d)
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	(h)	h	(h)	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	(l)	l	(l)	l
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	(c)	c
d	d	(d)	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	(g)	g	g	g
h	h	h	h	h	h
i	i	(i)	(i)	i	(i)
j	j	j	j	j	j
k	k	k	(k)	k	k
l	l	l	l	l	l
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	(b)	b	b
c	c	(c)	c	c	c
d	d	d	(d)	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	(h)	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	(m)



Lesson Number:

1	2	3	4	5	6
a	a	a	a	(a)	(a)
b	b	b	b	(b)	b
c	c	c	c	(c)	c
d	d	d	d	d	d
e	e	e	e	e	(e)
f	f	f	f	f	f
g	g	g	g	g	g
h	(h)	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m

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Evaluate

KS1 | LKS2 | UKS2

KS1 Design and Technology National Curriculum
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.

Children explore and evaluate a range of existing products.

They evaluate their ideas and products against design criteria.

Children can:

- a explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations;
- b explain positives and things to improve for existing products;
- c explore what materials products are made from;
- d talk about their design ideas and what they are making;
- e as they work, start to identify strengths and possible changes they might make to refine their existing design;
- f evaluate their products and ideas against their simple design criteria;
- g start to understand that the iterative process sometimes involves repeating different stages of the process.



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	f	f
	g	g	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	f	f
	g	g	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	f	f
	g	g	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	f	f
	g	g	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	f	f
	g	g	g	g	g	g



Lesson Number:	1	2	3	4	5	6
	a	a	a	a	a	a
	b	b	b	b	b	b
	c	c	c	c	c	c
	d	d	d	d	d	d
	e	e	e	e	e	e
	f	f	f	f	f	f
	g	g	g	g	g	g

Technical Knowledge

KS1 | LKS2 | UKS2

KS1 Design and Technology National Curriculum

Children build structures, exploring how they can be made stronger, stiffer and more stable.

They explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Children can:

- a build simple structures, exploring how they can be made stronger, stiffer and more stable;
- b talk about and start to understand the simple working characteristics of materials and components;
- c explore and create products using mechanisms, such as levers, sliders and wheels.



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	(b)	(b)	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	(a)	a	(a)
b	b	b	(b)	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	(b)	b	b	b	b	b
c	(c)	(c)	(c)	(c)	(c)	c

Cooking and Nutrition

KS1 | LKS2 | UKS2

KS1 Design and Technology National Curriculum
Children use the basic principles of a healthy and varied diet to prepare dishes.

They understand where food comes from.

Children can:

- a explain where in the world different foods originate from;
- b understand that all food comes from plants or animals;
- c understand that food has to be farmed, grown elsewhere (e.g. home) or caught;
- d name and sort foods into the five groups in the Eatwell Guide;
- e understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why;
- f use what they know about the Eatwell Guide to design and prepare dishes.

																																			
Lesson Number:						**Lesson Number:**						**Lesson Number:**						**Lesson Number:**						**Lesson Number:**						**Lesson Number:**					
1	**2**	**3**	**4**	**5**	**6**	**1**	**2**	**3**	**4**	**5**	**6**	**1**	**2**	**3**	**4**	**5**	**6**	**1**	**2**	**3**	**4**	**5**	**6**	**1**	**2**	**3**	**4**	**5**	**6**	**1**	**2**	**3**	**4**	**5**	**6**
a	a	a	a	a	a	(a)	a	a	a	a	a	a	a	a	a	a	(a)	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
b	b	b	b	b	b	b	b	b	b	b	b	(b)	b	b	(b)	b	(b)	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b	b
c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	(c)	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c	c
d	d	d	d	d	d	d	d	(d)	d	d	d	d	d	d	(d)	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
e	e	e	e	e	e	e	e	(e)	e	e	e	e	(e)	e	e	e	(e)	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e	e
f	f	f	f	f	f	f	f	f	f	(f)	f	f	f	(f)	f	(f)	(f)	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f	f

Design	KS1	LKS2	UKS2

KS2 Design and Technology National Curriculum
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing.

They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

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

They generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Children can:

a identify the design features of their products that will appeal to intended customers;

b use their knowledge of a broad range of existing products to help generate their ideas;

c design innovative and appealing products that have a clear purpose and are aimed at a specific user;

d explain how particular parts of their products work;

e use annotated sketches and cross-sectional drawings to develop and communicate their ideas;

f when designing, explore different initial ideas before coming up with a final design;

g when planning, start to explain their choice of materials and components including function and aesthetics;

h test ideas out through using prototypes;

i use computer-aided design to develop and communicate their ideas (see note on p. 1);

j develop and follow simple design criteria;

k work in a broader range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment.

Design

KS1 | LKS2 | UKS2



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	**c**	c	c
d	d	d	d	d	d
e	e	e	**e**	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	**j**	j	j
k	k	k	**k**	k	k



Lesson Number:

1	2	3	4	5	6
a	**a**	a	a	a	a
b	**b**	b	b	b	b
c	**c**	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	**f**	f	f	f	f
g	g	g	g	g	g
h	h	h	**h**	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	**k**	k	k	k	k



Lesson Number:

1	2	3	4	5	6
k	k	k	k	k	k
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	**e**	e
f	f	f	**f**	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	**j**	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	**d**	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k



Lesson Number:

1	2	3	4	5	6
a	a	**a**	a	a	a
b	b	**b**	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	**e**	e	**e**	e	e
f	f	f	f	f	f
g	g	**g**	g	g	g
h	h	h	**h**	h	h
i	i	i	i	i	i
j	j	**j**	**j**	j	j
k	k	**k**	k	k	k



Lesson Number:

1	2	3	4	5	6
a	a	a	**a**	a	a
b	b	b	**b**	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	**e**	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	**j**	j	j
k	k	k	k	k	k

Make

KS1 | LKS2 | UKS2

KS2 Design and Technology National Curriculum
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of making.

Children select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately.

They 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.

Children can:

Plan

a with growing confidence, carefully select from a range of tools and equipment, explaining their choices;

b select from a range of materials and components according to their functional properties and aesthetic qualities;

c place the main stages of making in a systematic order;

Practical skills and techniques

d learn to use a range of tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures;

e use a wider range of materials and components, including construction materials and kits, textiles and mechanical and electrical components;

f with growing independence, measure and mark out to the nearest cm and millimetre;

g cut, shape and score materials with some degree of accuracy;

h assemble, join and combine material and components with some degree of accuracy;

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

j join textiles with an appropriate sewing technique;

k begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics.

Make

KS1 | LKS2 | UKS2



Lesson Number:

1	2	3	4	5	6
a	a	a	a	(a)	(a)
b	b	b	b	b	(b)
c	c	c	c	c	c
d	d	d	d	d	(d)
e	e	e	e	(e)	(e)
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	(h)	(h)
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k



Lesson Number:

1	2	3	4	5	6
a	a	(a)	(a)	a	(a)
b	b	b	(b)	(b)	b
c	c	c	c	c	c
d	d	d	d	d	(d)
e	e	e	e	e	(e)
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	(j)
k	k	(k)	k	(k)	k



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	(a)
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	(d)
e	e	e	e	e	e
f	f	f	f	f	f
g	g	(g)	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k



Lesson Number:

1	2	3	4	5	6
a	a	a	(a)	a	(a)
b	b	b	b	b	b
c	c	c	c	c	c
d	(d)	d	(d)	d	(d)
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k



Lesson Number:

1	2	3	4	5	6
a	a	a	(a)	(a)	(a)
b	b	b	(b)	(b)	(b)
c	c	c	c	c	c
d	d	d	(d)	(d)	(d)
e	e	e	(e)	(e)	(e)
f	f	f	f	f	f
g	g	g	(g)	(g)	(g)
h	h	h	(h)	(h)	(h)
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	(k)	(k)



Lesson Number:

1	2	3	4	5	6
a	a	(a)	a	(a)	a
b	b	(b)	b	(b)	b
c	c	c	c	c	c
d	d	d	d	(d)	d
e	e	e	e	(e)	e
f	f	(f)	f	(f)	f
g	g	(g)	g	(g)	g
h	h	(h)	h	(h)	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	(k)

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Evaluate

KS1 | LKS2 | UKS2

KS2 Design and Technology National Curriculum
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.

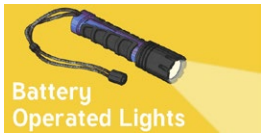
Children investigate and analyse a range of existing products.

They evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

They understand how key events and individuals in design and technology have helped shape the world.

Children can:

- a explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose;
- b explore what materials/ingredients products are made from and suggest reasons for this;
- c consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product;
- d evaluate their product against their original design criteria;
- e evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e

Technical Knowledge

KS1 | LKS2 | UKS2

KS2 Design and Technology National Curriculum

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

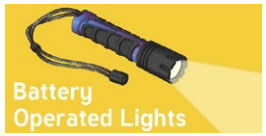
They understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].

They understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].

They apply their understanding of computing to program, monitor and control their products.

Children can:

- a understand that materials have both functional properties and aesthetic qualities;
- b apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products;
- c understand and demonstrate how mechanical and electrical systems have an input and output process;
- d make and represent simple electrical circuits, such as a series and parallel, and components to create functional products;
- e explain how mechanical systems such as levers and linkages create movement;
- f use mechanical systems in their products.



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	(a)
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	(d)	(d)	d	(d)	(d)
e	e	e	e	e	e	e
f	f	f	f	f	f	f



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e
f	f	f	f	f	f	f



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e
f	f	f	f	f	f	f



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	a	a	a	a	a	a
d	d	d	d	d	d	d
e	a	a	a	a	a	a
f	f	f	f	f	f	f



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	(c)	(c)	c	c	c	(c)
d	d	d	d	d	d	d
e	(e)	(e)	e	e	e	(e)
f	f	(f)	f	(f)	(f)	(f)



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	(a)	a
b	b	b	b	b	(b)	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d
e	e	e	e	e	e	e
f	f	f	f	f	f	f

Cooking and Nutrition	KS1	LKS2	UKS2

KS2 Design and Technology National Curriculum
Children understand and apply the principles of a healthy and varied diet.

They prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.

They understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Children can:

a start to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world;

b understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically;

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

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

e 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;

f understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body;

g prepare ingredients using appropriate cooking utensils;

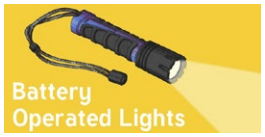
h measure and weigh ingredients to the nearest gram and millilitre;

i start to independently follow a recipe;

j start to understand seasonality.

Cooking and Nutrition

KS1 | LKS2 | UKS2



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j

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Design	KS1	LKS2	UKS2

KS2 Design and Technology National Curriculum

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing.

They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

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

They generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Children can:

a use research 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;

b use their knowledge of a broad range of existing products to help generate their ideas;

c design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user;

d explain how particular parts of their products work;

e use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas;

f generate a range of design ideas and clearly communicate final designs;

g consider the availability and costings of resources when planning out designs;

h work in a broad range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment.

Design

KS1 | LKS2 | UKS2



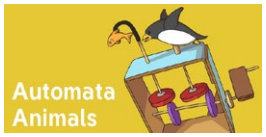
Lesson Number:

1	2	3	4	5	6
(a)	(a)	a	a	a	a
b	b	b	b	b	b
c	(c)	c	c	c	c
d	d	d	d	d	d
e	(e)	e	e	e	e
f	(f)	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h



Lesson Number:

1	2	3	4	5	6
a	(a)	a	a	a	a
b	b	b	b	b	b
c	(c)	(c)	(c)	c	c
d	d	d	d	d	d
e	e	e	(e)	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h



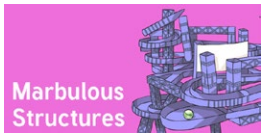
Lesson Number:

1	2	3	4	5	6
(a)	a	a	(a)	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	(d)	d	d
e	e	e	(e)	e	e
f	f	f	f	f	f
g	g	g	g	g	g
(h)	h	h	(h)	h	h



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	(e)	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h

Make	KS1	LKS2	UKS2

KS2 Design and Technology National Curriculum
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of making.

Children select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.

They 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.

Children can:

Planning

- a independently plan by suggesting what to do next;
- b with growing confidence, select from a wide range of tools and equipment, explaining their choices;
- c select from a range of materials and components according to their functional properties and aesthetic qualities;
- d create step-by-step plans as a guide to making;

Practical skills and techniques

- e learn to use a range of tools and equipment safely and appropriately and learn to follow hygiene procedures;
- f independently take exact measurements and mark out, to within 1 millimetre;
- g use a full range of materials and components, including construction materials and kits, textiles, and mechanical components;
- h cut a range of materials with precision and accuracy;
- i shape and score materials with precision and accuracy;
- j assemble, join and combine materials and components with accuracy;
- k demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product;
- l join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch;
- m refine the finish using techniques to improve the appearance of their product, such as sanding or a more precise scissor cut after roughly cutting out a shape.

Make

KS1 | LKS2 | UKS2



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
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k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m



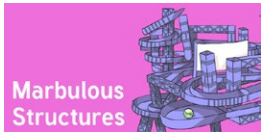
Lesson Number:

1	2	3	4	5	6
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b	b	b	b	b	b
c	c	c	c	c	c
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e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j
k	k	k	k	k	k
l	l	l	l	l	l
m	m	m	m	m	m

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Evaluate

KS1 | LKS2 | UKS2

KS2 Design and Technology National Curriculum
Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.

Children investigate and analyse a range of existing products.

They evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

They understand how key events and individuals in design and technology have helped shape the world.

Children can:

a complete detailed competitor analysis of other products on the market;

b critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make;

c evaluate their ideas and products against the original design criteria, making changes as needed.



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



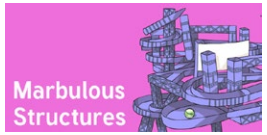
Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c

Technical Knowledge

KS1 | LKS2 | UKS2

KS2 Design and Technology National Curriculum

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

They understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].

They understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].

They apply their understanding of computing to program, monitor and control their products.

Children can:

- a apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products;
- b understand and demonstrate that mechanical and electrical systems have an input, process and output;
- c explain how mechanical systems, such as cams, create movement and use mechanical systems in their products;
- d apply their understanding of computing to program, monitor and control a product.



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d



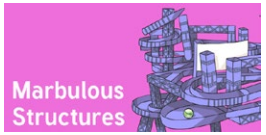
Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	(b)	b	b	b	b	b
c	c	c	c	c	c	c
d	(d)	d	(d)	d	d	(d)



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	(c)	(c)	c	c	(c)
d	d	d	d	d	d	d



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d



Lesson Number:	1	2	3	4	5	6
a	(a)	a	a	a	(a)	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d



Lesson Number:	1	2	3	4	5	6
a	a	a	a	a	a	a
b	b	b	b	b	b	b
c	c	c	c	c	c	c
d	d	d	d	d	d	d

Cooking and Nutrition	KS1	LKS2	UKS2

KS2 Design and Technology National Curriculum

Children understand and apply the principles of a healthy and varied diet.

They prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.

They understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Children can:

a know, 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;

b understand about seasonality, how this may affect the food availability and plan recipes according to seasonality;

c understand that food is processed into ingredients that can be eaten or used in cooking;

d demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source;

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

f 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;

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

h alter methods, cooking times and/or temperatures;

i measure accurately and calculate ratios of ingredients to scale up or down from a recipe;

j independently follow a recipe.

Cooking and Nutrition

KS1 | LKS2 | UKS2



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j



Lesson Number:

1	2	3	4	5	6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d
e	e	e	e	e	e
f	f	f	f	f	f
g	g	g	g	g	g
h	h	h	h	h	h
i	i	i	i	i	i
j	j	j	j	j	j

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