

# Design & Technology Parent Workshop





# Design & Technology at Dean Field

At Dean Field we aim to provide all children with a range of activities that will help them investigate, plan, make and evaluate.

Undertaking design and technology activities in school will give our children opportunities to use a range of materials and processes, and to work independently or as part of a team.

We would hope that these activities undertaken would support them in the wider world.

# DT taught at Dean Field



## **Design and technology programmes of study: key stages 1 and 2**

### **National curriculum in England**

#### **Purpose of study**













Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Teachers plan using the National Curriculum.









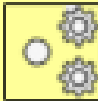



They use these objectives provided to plan exciting lessons to teach the children about design and technology.

# DT Overview













Teachers use this overview designed to link to their current topics.  
As you will see, your child will have a DT week themed or a food link to their current topic each half term.

Term	<u>Autumn 1</u> (6 weeks)  <u>MasterChef Day</u> <u>Celebration of class</u> <u>country foods</u>	<u>Autumn 2</u> (7 weeks)  <u>MasterChef Day</u>	<u>Spring 1</u> (7 weeks)  <u>DT Week</u>	<u>Spring 2</u> (7 weeks)  <u>MasterChef Day</u>	<u>Summer 1</u> (5 weeks)  <u>MasterChef Day</u>	<u>Summer 2</u> (7 weeks)  <u>DT Week</u>
Nursery	Class country/topic link: Antarctica making ice pops.  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Jolly Xmas Christmas party/baking  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Antarctica  Winter collages  	Topic: Easter  Easter baking  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Farms  Farm themed fruit kebabs  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Travel and transport  Travel and transport crafts  
Reception	Class country/topic link: Mexico making tortilla wraps/nachos.  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Celebration Celebration/party food decoration  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Under the Sea  Under the sea crafts  	Topic: Growing/Easter Cress growing and Easter baking  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Dinosaurs Dinosaur themed fruit kebabs  -Food safety & hygiene -Food knowledge  (Cooking & Nutrition) 	Topic: Space  Space box modelling  












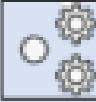
# Year 1 and 2

Year 1	<p>Class country/topic link: <b>China</b> making egg rice and noodles,</p> <ul style="list-style-type: none"> <li>-Food safety &amp; hygiene</li> <li>-Food knowledge</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>Childhood</b> Fruit salad</p> <ul style="list-style-type: none"> <li>-Healthy eating</li> <li>-Consumer awareness</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>It's good to be me</b> Moving pictures</p> <p>(Mechanisms - levers &amp; sliders) </p>	<p>Topic: <b>Sensational Safari</b> Safari Picnic Food</p> <ul style="list-style-type: none"> <li>-Healthy eating</li> <li>-Consumer awareness</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>Influential Individuals</b> Tea party for influential individual</p> <ul style="list-style-type: none"> <li>-Consumer awareness</li> <li>-Healthy eating</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>Influential Individuals</b> Bunting for Queen's celebration</p> <p>(Textiles) </p>
Year 2	<p>Class country/topic link: <b>Australia</b> making chicken parmigiana.</p> <ul style="list-style-type: none"> <li>-Food safety &amp; hygiene</li> <li>-Food knowledge</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>A walk in the park</b> Dips &amp; dippers</p> <ul style="list-style-type: none"> <li>-Consumer Awareness</li> <li>-Food knowledge</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>Circle of life</b> Vehicle for farmer</p> <p>(Mechanisms - wheels &amp; axels) </p>	<p>Topic: <b>Sensational Shibden</b> Park picnic</p> <ul style="list-style-type: none"> <li>-Healthy eating</li> <li>-Consumer awareness</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>Fire, Fire!</b> Soda-Bread Rolls</p> <ul style="list-style-type: none"> <li>-Healthy eating</li> <li>-Consumer awareness &amp; topic Link</li> </ul> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: <b>Sun, Sea and Sand</b> Seaside Bandstand</p> <p>(Structures) </p>

# Year 3 and 4

Year 3	<p>Class country/topic link: Poland making pierogi.</p> <p>-Food safety &amp; hygiene -Food knowledge</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Romans Scone based pizza</p> <p>-Healthy eating -Topic link - Roman feasts</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Dinosaurs Dinosaur themed kites</p> <p>(Textiles)</p> 	<p>Topic: American Adventures Pasta and Vegetable Sauce</p> <p>-Topic link -Healthy eating -Consumer awareness</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Invaders &amp; Settlers British tea party</p> <p>-Healthy eating -Consumer awareness</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Invaders &amp; Settlers Anglo-Saxon village</p> <p>(Structures)</p> 
Year 4	<p>Class country/topic link: Kenya making ugali with kachumbari.</p> <p>-Food safety &amp; hygiene -Food knowledge</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Ancient Egypt -Tabbouleh (bulgur wheat with vegetables)</p> <p>Topic link - Egyptian foods, importance of the Nile</p> <p>-Healthy eating</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Antarctic Adventure Moving animals</p> <p>(Mechanical systems - levers &amp; linkages)</p> 	<p>Topic: Stone Age Seasonal Spring Salad with Bread Plaits</p> <p>-Topic link -Consumer awareness -Food knowledge</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Bronze &amp; Iron Age Vegetable stew</p> <p>-Consumer Awareness -Healthy Eating</p> <p>(Cooking &amp; Nutrition)</p> 	<p>Topic: Yorkshire Moving bridge</p> <p>Electrical systems with crumble, series circuit and 2x sparkles/bulbs.</p> <p>(Electrical systems)</p> 

# Year 5 and 6

Year 5	<p>Class country/topic link: Brazil making Brazilian carrot cake.</p> <p>-Food safety &amp; hygiene -Food knowledge</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: Water World Spiced tomato afghan pizza</p> <p>-Consumer awareness -Topic link - recapping Islamic civilisation.</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: Space Brazilian headdress linked to class country</p> <p>(Textiles) </p>	<p>Topic: Ancient Greece Greek salad with tzatziki and flat breads</p> <p>-Consumer awareness -Topic link</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: Biomes Edible garden locally sourced</p> <p>-Healthy Eating -Consumer awareness</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: London Moving, light-up theatre posters</p> <p>Electrical systems with crumble, series circuit with bulbs, switches and motors)</p> <p>(Electrical systems) </p>
Year 6	<p>Class country/topic link: Ireland making Irish stew.</p> <p>-Food safety &amp; hygiene -Food knowledge -Topic link with rationing -Consumer awareness</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: Crime &amp; Punishment Empanadas</p> <p>-Healthy eating -Topic link - prisoners' food -Maths link - statistics</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: Extreme Earth Shelters</p> <p>(Structures) </p>	<p>Topic: Extreme Earth Italian Pizza</p> <p>-Topic/English link -Consumer Awareness - food from around the world -Maths link - measurement &amp; statistics linked with rising agents</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: If we could talk to animals Falafel - vegan dish</p> <p>-Consumer awareness - food choices, <u>eg</u> veganism -Healthy Eating and Science link - diet &amp; exercise</p> <p>(Cooking &amp; Nutrition) </p>	<p>Topic: Viking Moving Viking boat</p> <p>(Mechanical systems - gears, pulleys and cams) </p>



# DT Progression of Skills

Teachers use a progression of skills document to ensure previous skills are built upon in each year.

Design skills >

## Key Vocabulary:

Build, make, design, construct, shape, mould, join, attach, tools, cut, stick, glue, push, pull, cook, bake, knead, mix, stir, pour, spread, fill, measure

Aspect	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Design</b>  For Computer Aided Designs – look at using Purple Mash (seeing Computing skills progression) --- Take design inspiration from history  	<b>Model using software to create simple designs (Purple Mash)</b>  <b>With support design products that have a clear purpose and an intended user.</b>  --- <b>Start to look at existing historical products and as a group say what they like and don't like about them.</b>	<b>Use software to create designs (Purple Mash)</b>  <b>Design products that have a clear purpose and an intended user.</b>  --- <b>Look at existing objects and designs from the past to identify likes and dislikes of the designs.</b>  <b>Look at how products have been created</b>	<b>Begin to use software to design products</b>  <b>Design with purpose by identifying opportunities to design with support</b>  <b>Start to refine work and techniques as work progresses, by referring back to design brief and own designs.</b> --- <b>Disassemble products to understand how they work</b>  <b>Begin to look at some of the great designers in specific area of the DT project</b>	<b>Use software to design and represent products</b>  <b>Design with purpose by identifying opportunities to design</b>  <b>Refine work and techniques as work progresses, continually evaluating the product design</b> --- <b>Look at some designers in specific area of the DT project, and generate ideas for designs from what they have seen.</b>	<b>Design with the user in mind, motivated by the service &amp; purpose a product will offer</b>  <b>Make continual refinements to products</b>  <b>Begin to consider end result of the product, using art skills where possible.</b>  <b>Where appropriate, use computer aided designs to represent own designs.</b> --- <b>Look at a range of the great designers in specific area of the DT project.</b>  <b>Generate ideas for designs from what they have seen, and begin to give reasons for their choices.</b>	<b>Design with the user in mind, motivated by the service a product will offer.</b>  <b>Make products through stages of prototypes, making continual refinements.</b>  <b>Ensure products have a high quality finish, using art skills where appropriate.</b>  <b>Where appropriate, use prototypes, cross-sectional diagrams and computer aided designs to represent designs.</b> --- <b>Combine elements of design from a range of inspirational designers throughout history.</b>

# DT Progression of Skills

Making skills >

Technical knowledge and making skills >

<b><u>Make</u></b>  Materials (apply throughout all specific DT techniques and processes)  	<p><b>Cut materials safely using provided tools (scissors)</b></p> <p>Demonstrate a range of joining techniques (such as gluing, hinges or combining to strengthen).</p>	<p>Measure and mark out to the nearest centimetre.</p> <p>Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).</p>	<p>Being to cut materials by selecting appropriate tools with support.</p> <p>Being to measure and mark out to the nearest millimetre.</p> <p>Select appropriate joining techniques.</p>	<p>Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).</p> <p>Cut materials accurately and safely by selecting appropriate tools.</p> <p>Measure and mark out to the nearest millimetre.</p>	<p>Choose appropriate materials for constructing and creating products.</p> <p>Understand the properties and reasons behind using different materials.</p>	<p>Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).</p> <p>Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).</p>
<b><u>Technical Knowledge &amp; Make</u></b>  <b>Structures</b>  		<p>Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p>	<p>Choose suitable techniques to construct products or to repair items.</p> <p>Strengthen materials using suitable techniques.</p>			<p>Develop a range of practical skills to create products (such as cutting, nailing, gluing, and sanding).</p> <p>Choose appropriate materials to strengthen and structure.</p> <p>Understanding that different construction shapes are stronger and better suited to different tasks.</p>

# DT Progression of Skills

Food skills >

Food skills – Shape / mould	Shape - foods by hand – eg. long, thin shape  - begin to shape with a light-weight rolling pin	Shape - for a desired effect, eg. basic bread roll  - use a proper rolling pin	Shape - with accuracy for a desired effect, eg. basic bread roll  - use a rolling pin	Shape & mould - to create visually appealing products  - filling filo	Shape & mould - to create range of visually appealing products  - wrap (in pastry/filo)  - plaiting		
Food skills – Mix / Stir	Mix/Stir - loosely combine ingredients  - mash ingredients together with fork	Mix/Stir - to thoroughly combine ingredients  - whisk foods using fork  - knead dough  - beating eggs with support	Mix/Stir - with increasing thoroughness to combine ingredients - whisk foods using fork - rub in fat to flour - knead dough - cracking & beating eggs with support	Mix/Stir - range of ingredients to combine thoroughly - begin to whisk foods using a hand- whisk - cracking & beating eggs with support if needed	Mix/Stir - any ingredients to combine thoroughly - confidently whisk foods using a hand- whisk (avoiding spillage) - cracking & beating eggs	Mix/Stir - fold ingredients together carefully	Mix/Stir - any combination of ingredients
Food skills – Spoon	Spoon - large ingredients between containers with support	Spoon - range of ingredients between containers with limiting support	Spoon - ingredients into different containers with increasing accuracy & minimal spillage	Spoon - use 2 spoons to transfer ingredients into different size/shape containers with minimal spillage – eg liquid mixture into baking cases  - dividing ingredients out	Spoon - dividing ingredients out accurately and evenly	Spoon - able to gauge the quantities spooned to ensure an equal amount in each container	Spoon - any combination of ingredients into any container

# Must Knows

Teachers create must knows linked to each area of the DT curriculum to support the children in their learning. This also helps them to revise and remember. You will see these on your child's seesaw account.

Year 4 - DT - Cooking & Nutrition - Must Knows

Top Vocabulary

press	wrap
plait	crack and beat eggs
quarter when cutting	cooling
fry	analogue weighing scales
hygiene	rate and evaluate

Technical Skills

**Bridge Hold** for cutting higher-resistance foods

**Claw Grip** for cutting

Keep your fingers and thumb tucked into a claw shape whilst gripping the food. Cut using knife in other hand. Move claw back along the food until all cut.

cut equally

slicing into equal pieces

whisk

crack eggs

accurately sift

Equipment

grater

rolling pin

cutlery

knife

sieve

wooden spoon

cutter

mixing bowl

whisk

garlic press

recipe book

Health & Safety

Wear an apron

Wash your hands

Long hair tied back

clear up any spillages

Tidy up time!

wash and dry up

secure ingredients in containers

Baking

cooling

test for readiness

oven used by an adult

used by an adult to fry

On the hob

weighing scales

digital weighing scales

measuring spoon

measuring jug

choose own ratings

identify positives & negatives make suggestions for future



# DT Week in books

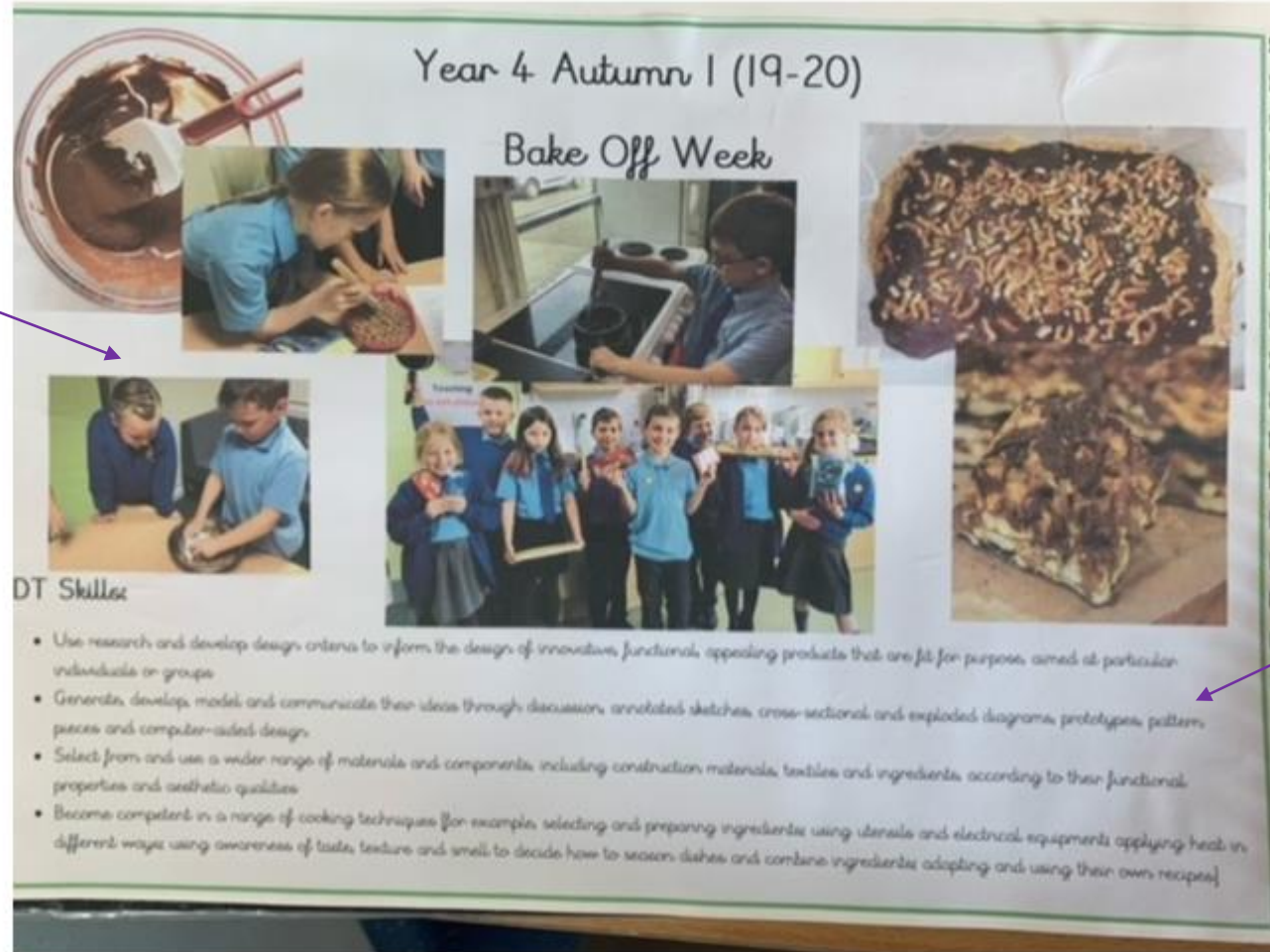
We evidence our DT work in big books throughout the year. This is an example of year 4 making Brazilian headdresses.



# DT Cooking in Books

We evidence our MasterChef days in the big books too.

Pictures of our  
MasterChef  
cooking



Skills used

# Assessments

Teachers use Target Tracker to monitor children's progress in DT. This helps the teach to plan efficiently and see what your child needs to improve in DT.

	Band 4 (10 statements)		Band 5 (10 statements)
Cooking and Nutrition	Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active	Cooking and Nutrition	Understand the main food groups and the different nutrients that are important for health
Cooking and Nutrition	Understand seasonality and the advantages of eating seasonal and locally produced food	Cooking and Nutrition	Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat
Cooking and Nutrition	Read and follow recipes which involve several processes, skills and techniques	Cooking and Nutrition	Select appropriate ingredients and use a wide range of techniques to combine them
Processes	Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience	Processes	Use his/her research into existing products and his/her market research to inform the design of his/her own innovative product
Processes	Create designs using exploded diagrams	Processes	Create prototypes to show his/her ideas



# Can you help us?

Do you have a design or technology background?

Do you work in a field of DT?

Do you know someone who does?

We would love to build some links with parents to further our possibilities and give children context for their learning. If you have a background in any field of design and technology and would be willing to talk to one of our year groups about what a job in DT entails please email the school office.

We will be looking for anyone who can talk about a career in DT to talk at various points through the year, including during Science Week in March 2021.



Thank you for the taking the time to read this presentation. If you would like to hear more about the teaching of DT at Dean Field please ring the office and ask to speak to Miss Lopuszniak.

