#### **Design Technology – Long Term Plan**

#### Overview

For each unit, use the Project on a Page planning sheets provided by the Design Technology Association (saved on SharePoint). Work through the planning sheet, highlighting and annotating as required. Where appropriate, links can be made with learning in other curriculum areas (and suggestions are included on the planning sheets).

### **Instructions for planning**

Please find the LTP sequence of units below. For each unit, the relevant Project on a Page (PoaP) is listed which steps you through the planning sequence. You work through the PoaP in numerical order, highlighting the option you want each time. The PoaP eliminates the need to produce short term plans per unit and give teachers the freedom to select their own final product out of a list of possibilities given, so that it can be more bespoke to the children at each school, whilst still ensuring progression of knowledge and skills that are definitely taught, irrespective of the final product.

EYFS have the prior knowledge per term shown below that provision and explicit teaching needs to deliver. Year 1 and 2 are taught on a two-year rolling programme. Year 3 and 4 are taught separately to Year 5 and 6. However, for the units shaded green, Year 5 and 6 sit in the Year 3 and 4 input, then the TA should work with Year 3 and 4 whilst Year 5 and 6 stays with the teacher to continue their input as the skills and end products are different.

### **Key Concepts**

Children need to be explicitly taught the Key Concepts. These are Design, Make and Evaluate. Children should be able to articulate these confidently describing the need for carefully considered design to make a successful product, before reflecting on the reasons as to what could be done better next time.

## **Spotlight Individuals**

Every unit has a 'Spotlight Individual' listed. These are real people, covering a range of DT areas – chefs, architects, manufacturers etc. There is a range of ethnicities and genders so that our DT curriculum is representative and inclusive, to inspire the next generation of designers and break down existing gender stereotypes around construction/design. For those units where Year 5 and 6 sit in the Year 3 and 4 input, the spotlight individual is the same. Similarly to our art curriculum, children should build up a knowledge of these spotlight individuals.

## **EYFS**

DT starts in EYFS. We have carefully considered the needed knowledge and skills throughout the key concept of design, make and evaluate to allow the children to be successful in entering their Year 1 and 2 DT Curriculum.

	Reception	
Autumn	- Experience of common fruits and vegetables, undertaking sensory activities – appearance, taste, smell.	
	- Experience of cutting soft fruits and vegetables using appropriate utensils.	
	- Watch how a blender is operated by the Year 1 and 2 children, discussing what they see.	
Spring	- Experience of using construction kits to build walls, towers and frameworks.	
	- Experience of using basic tools – scissors, hole punch, card, paper, glue.	

	- Experience of different methods joining paper and card together.	
	- Explored and used different fabrics.	
	- Cut and join fabrics with simple techniques (sticking, Velcro etc)	
	- Discussed the user and purpose of products	
Summer	- Assemble vehicles with construction kits (mobilo, loose parts)	
	- Explore moving vehicles through play – cars, ramps, wheelbarrows etc.	
	- Some experience creating simple plans for what they are making.	
	- Develop some cutting, joining and finishing skills with card and paper.	
	- Early experience of working with paper to create flags, hinges etc.	
	- Experience cutting, shaping and joining using scissors, glue, fasteners, paper, card, masking tape.	

## Key Stage 1

	Year 1	Year 2
Autumn	Food: Preparing fruit and vegetables - fruit salad	Food: Preparing fruit and vegetables – smoothies
	<ul> <li>PoaP entitled 'Y1/2 Preparing fruit and vegetables'</li> <li>Spotlight Individual: Jamie Oliver</li> </ul>	<ul> <li>PoaP entitled 'Y1/2 Preparing fruit and vegetables'</li> <li>Spotlight Individual: Jamie Oliver</li> </ul>
Spring	Structures: Freestanding structures	Textiles: Templates and joining techniques
	(eg. furniture, enclosures, equipment)	(eg. puppets, bags, clothes)
	<ul> <li>PoaP entitled 'Y1/2 Freestanding Structures'</li> <li>Spotlight Individual: Zaha Hadid</li> </ul>	<ul> <li>PoaP entitled 'Year 1/2 Templates and Joining'</li> <li>Spotlight Individual: Christopher Barlow</li> </ul>
Summer	Mechanisms: Wheels and axles	Mechanisms: Sliders and levers (eg. book)
	(eg. push/pull toys, vehicles)	
		- PoaP entitled 'Year 1/2 Sliders and Levers'
	<ul> <li>PoaP entitled 'Y1/2 Wheels and Axels'</li> </ul>	- Spotlight Individual: <b>Axel Scheffler</b>
	<ul> <li>Spotlight Individual: Henry Ford</li> </ul>	- Swap to 1

## Year 3/4

Autumn	Mechanical systems: levers and linkages (eg. book, card)	Mechanical systems: pneumatics (eg. moving toy, display)
	<ul> <li>PoaP entitled 'Levers and linkages'</li> <li>Spotlight Individual: Phillipe Starck</li> </ul>	<ul><li>PoaP entitled 'Pneumatics'</li><li>Spotlight Individual: John Dunlop</li></ul>
Spring	Structures: shell structures (eg. recyclable boxes, packaging)	Food: Healthy and varied diet (eg. sandwiches, wraps, salads)
	<ul> <li>PoaP entitled 'Y3/4 Shell Structures'</li> <li>Spotlight Individual: Frank Lloyd Wright</li> </ul>	<ul> <li>PoaP entitled 'Healthy and varied diet'</li> <li>Spotlight Individual: Nadiya Hussain</li> </ul>
Summer	Textiles: 2-D shape to 3-D product (eg. purse, bag, pencil case)	Electrical systems: simple circuits and switches (eg. noise-making toy, illuminated sign)
	<ul> <li>PoaP entitled '2D shapes to 3D products'</li> <li>Spotlight Individual: Coco Chanel</li> </ul>	<ul><li>PoaP entitled 'Simple circuits and switches'</li><li>Spotlight Individual: James Dyson</li></ul>

# Year 5/6

	Year 5	Year 6
Autumn	Mechanical systems: Cams (eg. moving toy, vehicle)  - PoaP entitled 'Cams' - Spotlight Individual: Johnathon Ive	Mechanical systems: pulleys or gears (eg. fairground ride, controllable vehicle)  - PoaP entitled 'Pulleys or Gears'  - Spotlight Individual: Phillippe Starck
Spring	Structures: frame structures (eg. gazebo, bird hide, kite)  - PoaP entitled 'Frame Structures'  - Spotlight Individual: Frank Lloyd Wright	Food: celebrating culture and seasonality (eg. pizza, scones, savoury muffin)  - PoaP entitled 'Celebrating culture and seasonality' - Spotlight Individual: Nadia Hussain
Summer	Textiles: combining different fabric shapes (eg. tool belt, tablet case, insulating bag.  - PoaP entitled 'Combining different fabric shapes' - Spotlight Individual: Coco Chanel	Electrical systems: monitoring and control (automatic nightlight, alarm)  - PoaP entitled 'More complex switches and circuits' - Spotlight Individual: James Dyson