

Progression of DT Paget Primary School KS1/2

Year 1

Progression of Skills in Design Technology



Developing, Planning and Communication					Working with Tools						
Draw on own experiences for ideas	Explain what they are going to do.	Identify target group for design	Model ideas in card/paper	Develop ideas based on research	Create using appropriate techniques.	With help measure, mark out, cut & shape diff materials.	Use tools safely.	Assemble/combine/join with temporary methods.	Select & use appropriate tools and processes (food).	Use basic food and personal hygiene.	Use simple finishing techniques to improve.

Evaluating Products and Processes			Cooking and Nutrition				Technical Knowledge				
Evaluate the product against its purpose.	Evaluate products strengths & changes to make to.	Evaluate product.	Begin to understand food comes from plants/animals	Explore understanding that food has to be farmed/grown/caught	Start to understand food groups	Begin to understand importance of '5 a day'.	Know how to prepare simple dishes safely/hygienically.	Know how use techniques- cutting/peeling/grating	Have a basic understanding about the working characteristics of materials and components.	Build a structure, exploring how it can be made stronger, stiffer and more stable.	Explore and use some mechanisms in my product, for example a lever or a slider.

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y1</b>	Creating faces using different materials –  Fruit faces  Looking at healthy foods	Enterprise week	Healthy eating  Design box for healthy wrap  Prepare healthy dishes		Building structures and explore durability  Land art <b>Andy Goldsworthy</b>	

Year 2

Progression of Skills in Design Technology



Developing, Planning and Communication					Working with Tools						
Draw on own/others experiences for ideas.	Develop ideas in many ways(Discuss/observe/draw/model).	Identify purpose for design.	Identify simple criteria.	Make simple drawings & label.	Select tools/materials. Name and describe them.	Measure/cut/score with some accuracy.	Use hand tools safely and appropriately.	Assemble/join/combine to make.	Cut/shape/join fabric. Use basic sewing techniques.	Follow safe food procedures.	Choose & use appropriate finishing techniques.

Evaluating Products and Processes			Cooking and Nutrition					
Evaluate against design criteria.	Evaluate products strengths & changes to make to.	Talk about ideas - likes / dislikes	Understands all food comes from plants/animals.	Know food has to be farmed/grown/caught .	Understand how to name/sort food groups.	Know everyone should eat at least '5 a day' every day.	Show how to prepare simple dishes safely/hygienically.	Show how to use techniques- cutting/peeling/ grating.

Technical Knowledge			
Have an understanding about the simple working characteristics of materials and components.	Build different structures, exploring and understanding how it can be made stronger, stiffer and more stable.	Evaluate and explain how I made my structure more stable, whilst beginning to use the correct technical vocabulary.	Explore and use mechanisms in my product, including levers, sliders, wheels and axels.

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y2</b>	<p><i>Communicate design and evaluate ideas,</i></p> <p><i>Use a wide range of materials and components.</i></p> <p><i>Prepare healthy dishes</i></p> <p><i>Understand where food comes from</i></p> <p><i>Pepper Boats (not taught Aut 1 due to COVID)</i></p>	<p>Communicate design and evaluate ideas,</p> <p>Use a wide range of materials and components.</p> <p>Sewing – Enterprise week</p>	<p>Communicate design and evaluate ideas,</p> <p>Use a wide range of materials and components.</p> <p>Design a town or country house</p>		<p>Communicate design and evaluate ideas,</p> <p>Prepare healthy dishes</p> <p>Understand where food comes from</p> <p>Pepper Boats (Not Aut 1 due to COVID recovery)</p>	

Year 3

Developing, Planning and Communication					Working with Tools						Evaluating Products and Processes		
Generate ideas for item considering purpose of item	Identify purpose / establish criteria	Plan order of work	Explore / develop / communicate / design by modelling	Make drawings with labels	Select tools and techniques	Measure / mark out / cut / score / assemble with more accuracy	Work safely / accurately with a range of simple tools	Think about ideas during make and change if this helps improve work.	Measure/tape or pin/cut/join fabric with some accuracy.	Demonstrate hygienic food prep and storage.	Use finishing techniques to strengthen/improve product using range of equip.(Inc. ICT)	Evaluate product against original criteria.	Disassemble and evaluate familiar products.

Cooking and Nutrition					Technical Knowledge					
Start know which food is grown/reared/ caught in Uk/Europe/wider world.	Understand how to prepare/cook variety of predominantly savory dishes safely/hygienically (inc. heat source)	understand using range of techniques- peeling/chopping/ slicing/grating/mixing/spreading/kneading/baking.	Start to understand a healthy diet is made of variety/balance of different food/drinks.	Begin to know to be active/ healthy, food and drink are needed for energy.	Apply an understanding of how to strengthen and stiffen more complex structures	Evaluate and explain how I made my structure more stable, using the correct technical vocabulary.	Understand and can use some mechanical systems in my products, for example, gears, pulleys, cams, levers or linkages.	Know how different mechanical systems such as levers and linkages create movement..	Have a basic understanding of electrical systems which can be applied to my products, for example, incorporating switches or buzzers.	Can apply my understanding of computing to program, attempting to monitor and control my product.

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y3</b>	Build complex structures	Enterprise week.	Apply principals of a healthy diet and food tech.  Link to Cadbury chocolate drink		Investigating products -  Father's day frames	

Year 4

Developing, Planning and Communication				Working with Tools						Evaluating Products and Processes	
Generate ideas considering purpose of design.	Make labeled drawings from different views showing features.	Develop clear idea/ plan how to use materials/equipment/preprocess /alternative methods if first attempt fails.	Evaluate products & identify criteria for design.	Select appropriate tools/ techniques for making	Measure/mark out/ cut & shape a range of materials, use appropriate tools, equipment, techniques.	Join/combine materials & components accurately in temporary/permanent ways.	Sew using range of stitches/weave/ knit.	Measure/ tape/ pin/ cut/ join fabric with some accuracy.	Use simple graphical communication techniques.	Evaluate their work during and at the end.	Evaluate products carrying out appropriate tests.

Cooking and Nutrition					Technical Knowledge				
Understand food is grown/reared/cught in the Uk, Europe/ wider world.	Understand how to prepare/cook a variety of predominantly savoury dishes safely/hygienically including use of heat source.	Know how to use range of techniques-peeling/ chopping/slicing/grating/mixing/spreading/kneading/baking.	Know that a healthy diet is made up of a variety/balance of different food/drink.	Know to be active/healthy, food and drink are needed for energy.	Apply my understanding of how to strengthen, stiffen and reinforce more complex structures, and explain the process using the correct technical vocabulary.	Understand and can use a range of mechanical systems in my products, including gears, pulleys, cams, levers and linkages.	Know and can explain how different mechanical systems such as levers and linkages create movement.	Know how most electrical systems work and can apply them to my products, for example, using switches, bulbs, buzzers or motors.	Know how to compute a basic program and can monitor and control my products.

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y4</b>	Generate model and communicate ideas  Design and make Roman mosaics	Use a range of materials and components  Enterprise week	Build complex structures/earthquake proof structure	Processes.	Cooking and nutrition a range of dishes – Egyptian food	

Year 5

Developing, Planning and Communication				Working with Tools					Evaluating Products and Processes		
Generate ideas through brainstorm. Identify purpose.	Draw up a specification for idea.	Develop clear idea of what's to be done/ planning how to use materials/ equipment/ processes/ alternative methods if first attempt fails.	Use results of investigations/ information sources/ICT when designing.	Select appropriate materials/tools/techniques	Measure/mark out accurately.	Use skills in using different tools/equipment safely and accurately.	Weigh/measure accurately (time, dry ingredients, liquids).	Apply rules of basic food hygiene/safe practices.	Cut/ join with accuracy to ensure good quality finish.	Evaluate product against original specification.	Evaluate it personally/seek evaluation from others.

Cooking and Nutrition						Technical Knowledge				
Understand food is grown/ reared/ caught in UK, Europe/wider world.	Begin to understand seasons may affect available food.	Understand food is processed into ingredients- eaten or used in cooking.	Know how to prepare/cook a variety of predominately savoury dishes safely/hygienically (Inc use of a heat source).	Understand how to use range of techniques- peeling/ chopping/slicing/ grating/mixing/spr eading/kneading/b	Begin to understand different food/drink contain nutrients/water/fibre needed for health.	Apply and explain my understanding of how to strengthen, stiffen and reinforce complex structures, explaining the process in detail using the correct technical vocabulary.	Understand and use the different mechanical systems in my products, such as gears, pulleys, cams, levers and linkages.	Know and can explain mechanical systems such as cams or pulleys or gears create movement.	Know how a range of electrical systems work and can apply them to my products, including series circuits, incorporating switches, bulbs, buzzers and motors.	Apply my knowledge and understanding of computing to a program, and can monitor and control my products.

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y5</b>	Design, evaluate and create Viking amulets using a range of tools	Making parachutes – link with Science  Use research and develop design criteria  Enterprise Week		Space models or rockets	Use research and develop design criteria – use a wide range of tools - evaluate  Ancient Greek banquet	

Year 6

Developing, Planning and Communication				Working with Tools						
Communicate ideas through detailed labeled drawings.	Develop a design specification.	Explore/ develop & communicate parts of design proposal. Model in variety of ways.	Plan order of work/choose appropriate materials/tools/techniques.	Select appropriate tools/materials/ components/ techniques.	Assemble components make working models.	Use tools safely/accurately	Construct products using permanent joining techniques	Make modifications as they go.	Pin/sew/stich materials to create product.	Achieve a quality product.

Evaluating Products and Processes			Cooking and Nutrition					
Evaluate products identifying strengths/areas of development/carrying our tests.	Record evaluations using drawings/labels.	Evaluate against their original criteria & suggest way to improve.	Understand food is grown/ reared/ caught in Uk, Europe/wider world.	Understand season many affect available food.	Understand food is processed into ingredients- eaten or used in cooking.	Know how to prepare/cook a variety of predominately savoury dishes safely/hygienically (Inc use of a heat source).	Understand how to use range of techniques- peeling/ chopping/slicing/ grating/mixing/spreading/kneading/baking.	Understand different food/drink contain nutrients/water/fibre needed for health.

Technical Knowledge			
Understand the properties of materials and can apply my knowledge to my products, strengthening and stiffening complex structures, explaining and evaluating the process using technical vocabulary.	Understand and accurately use the common mechanical systems in my products, including gears, pulleys, cams, levers and linkages and begin to understand how more advanced mechanical system are used.	Know how the different electrical systems work and can apply them to my products, including series circuits, incorporating switches, bulbs, buzzers and motors, and have a basic understanding on how more advanced electrical systems can be powered.	Apply my in depth knowledge of computing to program, and can monitor and control my products.

Subject	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y6</b>	Chinese printing and lanterns	Enterprise week	Cooking linked to comic relief			Building mechanical systems (link to Hugo)