

## Design and Technology – Progression of Skills – Colney Heath Primary School

	EYFS	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Units	DT will be taught through a combination of adult led and child initiated activities ensuring the children's interests are followed throughout the year.	<p>Mechanisms – Sliders and levers</p> <p>Cooking and Nutrition – preparing fruit and vegetables</p>	<p>Mechanisms – Wheels and axles</p> <p>Structures – Free standing structures</p> <p>Textiles – Textiles and finishing techniques</p>	<p>Cooking and Nutrition – Healthy Diet</p> <p>Mechanisms – Levers</p> <p>Textiles – 2D to 3D products</p>	<p>Structures – Shell Structures</p> <p>Electrical Systems – Simple Circuits</p> <p>Mechanisms - Pneumatics</p>	<p>Structures – Frame Structures</p> <p>Textiles – Combining different fabric shapes</p> <p>Mechanisms – Cams</p>	<p>Electrical Systems – more complex switches and circuits</p> <p>Textiles – Using computer aided design</p> <p>Cooking and Nutrition – Celebrating culture and seasonality</p>
Design	<ul style="list-style-type: none"> <li>-Selects appropriate resources</li> <li>-Uses gestures, talking and arrangements of materials and components to show design</li> <li>-Uses contexts set by the adult and child</li> <li>-Uses language of designing and making (join, build, shape, longer, shorter, heavier etc.)</li> </ul>	<ul style="list-style-type: none"> <li>-Has own ideas</li> <li>-Explains what they want to do</li> <li>-Explains what the product is for, and how it will work</li> <li>-Uses pictures and words to plan, begin to use models</li> <li>-Designs a product following design criteria</li> <li>-Researches similar existing products</li> </ul>	<ul style="list-style-type: none"> <li>-Has own ideas and plan what to do next</li> <li>-Explains what they want to do and describe how they may do it</li> <li>-Explains purpose of product, how it will work and how it will be suitable for the user</li> <li>-Describes design using pictures, words and diagrams</li> <li>-Designs products for themselves and others following design criteria</li> <li>-Chooses best tools and materials, and explains choices</li> <li>-Uses knowledge of existing products to produce ideas</li> </ul>	<ul style="list-style-type: none"> <li>-Begins to research others' needs</li> <li>-Shows design meets a range of requirements - Describes purpose of product</li> <li>-Follows a given design criteria</li> <li>-Has at least one idea about how to create product</li> <li>-Creates a plan which shows order, equipment and tools</li> <li>-Describes design using an accurately labelled sketch and words</li> <li>-Makes design decisions</li> <li>-Explains how product will work</li> <li>-Makes a prototype - Begins to use computers to show design</li> </ul>	<ul style="list-style-type: none"> <li>-Uses research for design ideas -Shows design meets a range of requirements and is fit for purpose</li> <li>-Begins to create own design criteria</li> <li>-Has at least one idea about how to create product and suggest improvements for design</li> <li>-Produces a plan and explain it to others</li> <li>-Say how realistic plan is.</li> <li>-Includes an annotated sketch --Makes and explains design decisions considering availability of resources</li> <li>-Explains how product will work</li> <li>-Makes a prototype</li> <li>-Begins to use computers to show design</li> </ul>	<ul style="list-style-type: none"> <li>-Uses internet and questionnaires for research and design ideas</li> <li>-Takes a user's view into account when designing</li> <li>-Begins to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose</li> <li>-Creates own design criteria</li> <li>-Has a range of ideas</li> <li>-Produces a logical, realistic plan and explain it to others</li> <li>-Uses cross-sectional planning and annotated sketches</li> <li>-Makes design decisions considering</li> </ul>	<ul style="list-style-type: none"> <li>-Draws on market research to inform design</li> <li>-Uses research of user's individual needs, wants, requirements for design</li> <li>-Identifies features of design that will appeal to the intended user</li> <li>-Creates own design criteria and specification</li> <li>-Comes up with innovative design ideas</li> <li>-Follows and refines a logical plan</li> <li>-Uses annotated sketches, cross-sectional planning and exploded diagrams</li> </ul>

						time and resources. - Clearly explains how parts of product will work -Models and refines design ideas by making prototypes and using pattern pieces -Uses computer-aided designs	-Makes design decisions, considering, resources and cost -Clearly explains how parts of design will work, and how they are fit for purpose -Independently models and refines design ideas by making prototypes and using pattern pieces -Uses computer-aided designs
Make	-Constructs with a purpose, using a variety of resources -Uses simple tools and techniques -Builds/constructs with a wide range of objects -Selects tools & techniques to shape, assemble and join -Replicates structures with materials / components -Discusses how to make an activity safe and hygienic -Records experiences by	-Explains what's being made and why -Considers what to do next -Selects tools/equipment to cut, shape, join, finish and explains choices -Measures, marks out, cuts and shapes, with support -Chooses suitable materials and explains choices -Tries to use finishing techniques to make product look good	-Explains what it being made and why it fits the purpose -Makes suggestions as to what to do next -Joins materials/components together in different ways -Measures, mark outs, cuts and shapes materials and components, with support -Describes which tools to do and why -Chooses suitable materials and explain choices depending on characteristics -Uses finishing techniques to make products look good	-Selects suitable tools/equipment, explain choices; begin to use them accurately -Selects appropriate materials, fit for purpose -Works through plan in order -Considers how good product will be -Begins to measure, mark out, cut and shape materials/components with some accuracy -Begins to assemble, join and combine materials and components with some accuracy -Begins to apply a range of finishing techniques with some accuracy	-Selects suitable tools and equipment, explains choices in relation to required techniques and uses accurately -Selects appropriate materials, fit for purpose; explains choices -Works through plan in order -Realises if product is going to be good quality -Measures, marks out, cuts and shapes materials/components with some accuracy -Assembles, joins and combines materials and components with some accuracy -Applies a range of finishing techniques with some accuracy	-Uses selected tools/equipment with good level of precision -Produces suitable lists of tools, equipment/materials needed -Selects appropriate materials, fit for purpose; explain choices, considering functionality -Creates and follows detailed step-by-step plan -Explains how product will appeal to an audience -Mainly accurately measures, marks out, cuts and shapes materials/components -Mainly accurately assembles, joins and	-Uses selected tools and equipment precisely -Produces suitable lists of tools, equipment, materials needed, considering constraints -Selects appropriate materials, fit for purpose; explains choices, considering functionality and aesthetics -Creates, follows, and adapts detailed step-by-step plans -Explains how product will appeal to audience; makes changes to improve quality -Accurately measures, marks out, cuts and

	drawing, writing, voice recording -Understands different media can be combined for a purpose	-Works in a safe and hygienic manner	-Works safely and hygienically			combines materials/components -Mainly accurately applies a range of finishing techniques -Uses techniques that involve a small number of steps -Begins to be resourceful with practical problem	shapes materials/components -Accurately assembles, joins and combines materials/components -Accurately applies a range of finishing techniques -Uses techniques that involve a number of steps -Is resourceful with practical problems
Evaluate	-Adapts work if necessary -Dismantles, examines, talks about existing objects/structures -Considers and manages some risks -Practises some appropriate safety measures independently Talks about how things work -Looks at similarities and differences between existing objects / materials / tools -Shows an interest in technological toys	-Talks about work, linking it to what was asked to do -Talks about existing products considering: use, materials, how they work, audience, where they might be used -Talks about existing products, and say what is and isn't good -Talks about things that other people have made -Begins to talk about what could make product better	-Describes what went well, thinking about design criteria -Talks about existing products considering: use, materials, how they work, audience, where they might be used; express personal opinion -Evaluates how good existing products are - Talks about what could be done differently if repeated and why	-Looks at design criteria while designing and making -Uses design criteria to evaluate finished product -Says what could be changed to make design better -Begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose -Begins to understand by whom, when and where products were designed -Learns about some inventors/designers/engineers/chefs/manufacturers of	-Refers to design criteria while designing and making -Uses criteria to evaluate product -Begins to explain how the original design could be improved -Evaluates existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose -Discusses by whom, when and where products were designed -Researches whether products can be recycled or reused -Knows about some inventors/designers/engineers/chefs/manufacturers of ground-breaking products	-Evaluates quality of design while designing and making -Evaluates ideas and finished product against specification, considering purpose and appearance -Tests and evaluates final product -Evaluates and discusses existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose -Begins to evaluate how much products cost to make and how innovative they are -Researches how sustainable materials are	-Evaluates quality of design while designing and making; is it fit for purpose? -Keeps checking design is best it can be -Evaluates ideas and finished product against specification, stating if it's fit for purpose -Tests and evaluates final product; explains what would improve it and the effect different resources may have had -Complete thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose -

	-Describes texture			ground-breaking products		-Talks about some key inventors/designers/engineers/chefs/manufacturers of ground-breaking products	Evaluates how much products cost to make and how innovative they are -Researches and discusses how sustainable materials are -Considers the impact of products beyond their intended purpose -Discusses some key inventors/designers/engineers/chefs/manufacturers of ground-breaking products
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