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St John's RC Primary School, Burnley
Whole School Progression Grid
Design Technology

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	EYFS Framework **Physical Development** • Gross and fine motor experiences develop incrementally throughout early childhood • Fine motor control and precision helps with hand-eye co-ordination, which is later linked to early literacy. • Repeated and varied opportunities to explore and play with small world activities, puzzles, arts and crafts and the practice of using small tools, with feedback and support from adults, allow children to develop proficiency, control and confidence	**NC programmes of study – KS1 Pupils should be taught about:** **Design** 1. design purposeful, functional, appealing products for themselves and other users based on design criteria 2. generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **Make** 1. select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] 2. select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **Evaluate** 1. explore and evaluate a range of existing products 2. evaluate their ideas and products against design criteria **Technical knowledge** 3. build structures, exploring how they can be made stronger, stiffer and more stable 4. explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. **Cooking and nutrition** 1. use the basic principles of a healthy and varied diet to prepare dishes 2. understand where food comes from.		**NC programmes of study – KS2 Pupils should be taught about:** **Design** 1. use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups 2. generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** 1. select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 2. 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** 1. investigate and analyse a range of existing products 2. evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 3. understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** 1. apply their understanding of how to strengthen, stiffen and reinforce more complex structures 2. understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] 3. understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] 3. apply their understanding of computing to program, monitor and control their products. **Cooking and nutrition** 1. understand and apply the principles of a healthy and varied diet 2. prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques 3. understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.		
Design		1. Design purposeful products for themselves using words and pictures. 2. Generate and communicate ideas through talking and drawing.	1. Design purposeful, functional, appealing products for themselves and others based on design criteria. 2. Generate, develop, model and communicate ideas through drawing, templates, mock-ups and ICT where appropriate.	1. Develop more than one design or adaptation of an initial design. 2. Plan a sequence of actions to make a product. 3. Think ahead about the order of work and decide upon tools and materials. 4. Propose realistic suggestions as to how design ideas can be achieved.	1. Plan by drawing using annotated sketches. 2. Use prototypes to develop and share ideas. 3. Consider aesthetic qualities of materials chosen. 4. Use CAD where appropriate.	1. Record ideas using annotated sketches. 2. Use models, kits and drawings to help formulate design ideas. 3. Sketch and model alternative ideas. 4. Decide which design idea to develop.	1. Plan the sequence of work. 2. Devise step by step plans which can be read / followed by someone else. 3. Use exploded diagrams, cross-sectional diagrams, protypes, pattern pieces and CAD to generate, develop, model and communicate ideas.
Make		1. Select tools and equipment from a limited range to perform practical tasks such as cutting and joining.	1. Select tools and equipment to perform cutting, shaping, joining and finishing.	1. Select from a wider range of tools and equipment to perform practical tasks eg making an axel, with support.	1. Select from a wider range of tools and equipment to perform practical tasks eg building a gift box with increasing accuracy.	1. Select from a wider range of tools and equipment to perform practical tasks eg building a	1. Select tools and equipment to perform practical tasks accurately. 2. Make prototypes. 3. Use research and information to inform decisions.

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		1. Select materials and components from a limited range.	2.Select from and use a wide range of materials and components.	3. Select from a limited range of materials according to their functional properties. 4. Begin to use appropriate finishing techniques.	2. Select from a limited range of materials according to their functional properties and aesthetic qualities. 3. Prepare pattern pieces or templates. 4. Use appropriate finishing techniques with more confidence.	simple structure independently. 2. Select from a wider range of materials and components according to their functional properties. 3. Select from and use a wide range of tools. 4. Cut accurately and safely to a marked line.	3. Produce detailed lists of ingredients/components/materials and tools. 4. Refine a product – review and rework/improve.
Evaluate		1. Explore existing products and investigate how they have been made (including teacher-made examples). 2. Talk about their design as they develop and identify good and bad points. 3. Say what they like and do not like about items they have made and attempt to say why.	1. Decide how existing products do / do not achieve their purpose. 2. Discuss how closely their finished product meets their own design criteria.	1. Investigate similar products to the one to be made to give starting points for a design. 2. Research needs of user. 3. Consider and explain how finished products could be improved. 4. Discuss how well the finished product meets the user's design criteria. 5. Investigate key events and individuals in textiles and structures.	1. Draw / sketch existing products in order to analyse and understand how products are made. 2. Identify the strengths and weaknesses of design ideas in relation to purpose / user. 3. Consider and explain how the finished product could be improved. 4. Investigate key events and individuals in electrical and pneumatics systems.	1. Research and evaluate existing products. 2. Consider user and purpose. 3. Consider and explain how the finished product could be improved related to design criteria. 4. Investigate key events and individuals in architecture and mec.hanical systems.	1. Identify strengths and weaknesses of their design ideas. 2. Report using correct technical vocabulary. 3. Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user. 4. Understand how key people have influenced design in a variety of contexts. 5. Investigate key events and individuals in pattern design, textiles and engineering.
Technical Knowledge		1. Start to use technical vocabulary. 2. Join paper, card and materials using glue or fastenings to create structures. 3. Show how to stiffen some materials. 4. Explore and begin to use some	1. Use more technical vocabulary. 2. Join wood, plastic and cardboard in a variety of ways to create structures. 3. Explore how structures can be made stiffer, stronger and more stable.	1. Strengthen structures they have made eg frames with diagonal struts. 2. Begin to understand how to reinforce structures. 3. Begin to understand and use electrical systems.	1. Develop understanding of how structures are strengthened, stiffened and reinforced. 2. Develop understanding of and use some mechanical systems eg levers and linkages.	1. Stiffen and reinforce more complex structures. 2. Build frameworks to support mechanisms. 3. Understand and use more mechanical systems in their	1. Strengthen, stiffen and reinforce more complex structures. 2. Understand and use mechanical systems in their products eg cams 3. Use electrical systems with series circuits incorporating switches, bulbs, buzzers and motors.

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		mechanisms eg sliders & levers. 5. Know some ways of making structures stronger.	4. Explore and use mechanism in their products eg levers, sliders, wheels and axles		3. Understand and use electrical systems in their products eg series circuits with switches 4. Use ICT to control products.	products eg gears and pulleys. 4. Use electrical systems eg with buzzes, bulbs and motors. 5. Use ICT to program and control products.	4. Program, monitor and control using ICT.
Cooking and Nutrition		1.Know about the need for a variety of foods in a healthy diet. 2. Group familiar food products e.g. fruit and vegetables, diary. 3. Prepare and make a simple healthy snack eg a fruit kebab. 3. Begin to understand how to work safely and hygienically.	1. Use the basic principles of a healthy and varied diet to create a healthy dish eg couscous salad or pasta salad. 2.Understand where food comes from 3. Work safely and hygienically.	1. Understand what makes a healthy meal. 2. Weigh and measure basic ingredients for dish using digital scales. 3. With supervision mash, grate and cut food into even strips. 4. Observe an adult cooking safely. 5. Follow a simple recipe with adult guidance. 6.With adult guidance use a toaster or a microwave to make a simple dish eg scrambled egg.	1. Plan a snack showing a greater awareness of a healthy diet and show an awareness of portion size. 2. Understand seasonality. 3. With supervision, use a serrated knife or a peeler and dice and grate food. 4. With help, begin to use a hob or oven to cook a simple dish and handle hot food safely. 5. Crack an egg with adult help	1. Combine a variety of ingredients to produce a healthy savoury dish of appropriate portion size. 2. Use a measuring jug to measure liquids. 3. Select and prepare foods for a particular purpose -with supervision using the correct technique. 4. Confidently crack an egg 5.Combine wet and dry ingredients in a recipe eg banana and yoghurt biscuits. 5.Know some of the basic processes to get food from farm to plate. 6 Use labels on food to inform choices.	1. Understand and apply the principles of a healthy and varied diet. 2. Choose ingredients to support healthy eating choices when designing food products. 3. Prepare and cook a variety of mostly savoury dishes using a range of cooking techniques. 4 Know how to knead bread. 5. Understand social influences on the food we choose to eat (eg media, peer pressure and ethical choices).

Skills progression created for our school using the following: NC for Design Technology; some adaptions from LPDS (Lancashire Professional Development Service) planning and assessment materials.