Design and Technology — Early Years and Key Stage 1

	EYFS: Nursery • Aquariums • Easter Gardens • Character masks	EYFS: Reception • Box buildings • Weather vanes • Character models	Year 1 • Designing a toy and making fruit salad/fruit kebabs • Making a vehicle • Designing and making a basket	Year 2 • Construction of London landmark • Recycled fashion show • 3D Superheroes Book	End of Key Stage Expectations
Design	I can construct with a purpose in mind, using a variety of resources.	I can use what I have learnt about media and materials in original ways, thinking about uses and purposes. I can experiment with colour, design, texture, form and function. I can represent my own ideas, thoughts and feelings through design and technology.	I can think of some ideas of my own. – Toys I can explain what I want to do. I can describe my design by using pictures, model mock-ups and words. Journeys – making a vehicle I can design a product for myself and others following design criteria.	I can think of ideas and plan what to do next. I can choose the best tools and materials. I can give a reason why these are best tools or materials. I can describe my design by using pictures, **diagrams**, model mock-ups, words and ICT. I can design a product for others following design criteria.	**Design** Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
Make	I can stack blocks vertically and horizontally, making enclosures and creating spaces. I can join construction pieces together to build and balance. I can use available resources to create props to support role-play.	I can combine different media to create new effects. I can manipulate materials to achieve a planned effect. I can adapt my work where necessary.	I can explain what I am making and why. I can select tools and equipment to cut, shape, join and finish. I can describe which tools I am using and why. I can choose materials and explain why they are being used.	I can explain what I am making and why my audience will like it. I can join things (materials/ components) together in different ways. I can choose materials and explain why they are being used depending on their characteristics.	**Make** Select from and use a range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
Evaluate		I am beginning to talk about the ideas and processes which have led me to make designs or products. I am beginning to talk about features of my own and others' work, recognising the differences between them and the strengths of others.	I can describe how existing products work. I can talk about my own work linked to what I was asked to do. I can talk about my own work and things that other people have done.	I can describe what went well with my work. I can evaluate what I would do differently if I did it again and why. I can judge my work against the design criteria.	**Evaluate** Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria
Technical Knowledge	I can use simple tools and techniques competently and appropriately. I show understanding of the need for safety when tackling new challenges, and consider and manage some risks.	I can safely use and explore a variety of materials, tools and techniques. I can select the tools and techniques needed to shape, assemble and join materials	**Use of materials:** I can measure materials to use in a model or structure. I can join material in different ways. I can use joining, folding or rolling to make it stronger. I can use axels and wheels in my work. Journeys – making a vehicle **Cooking and nutrition:** I can describe the properties of the ingredients I am using and why it is important to be varied in my diet. Keeping Healthy I can explain what it means to be hygienic. Keeping Healthy I can say where food comes from i.e. animals, underground, over ground etc.	**Mechanisms:** I can join materials together as part of a moving product. I can add a specific design to my product. **Textiles:** I can cut and join textiles together to make something. I can explain why they chose a certain textile.	**Technical knowledge** Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms, such as levers, sliders, wheels and axles, in their products. **Cooking and Nutrition** Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from

St Vincent's Catholic Primary School Design & Technology Progression Map

Together Through Christ We Grow and Learn

	Year 3 • Designing and constructing Egyptian boats with a focus on textiles • Designing and making a stone age shelter using natural materials *(art links - sketching)* • Designing and making a healthy smoothie	Year 4 • Designing and making a Colosseum • Making a musical instrument. • Designing and making a set design for a Shakespeare play	Year 5 • Designing and constructing settlement islands with a focus on textiles • Nuffield project 'How will your beast open its mouth?' • Designing and making a Greek Feast	Year 6 • 'Make do and Mend'-designing and making a new product out of old textiles. • Designing and making a model depicting the Blitz using electricity circuits. • Making an animal rights quilt and a bridge (Link with Geography).	End of Key Stage Expectations
Design	I can put together a plan which shows the order and also what equipment and tools I need. I can describe my design using an accurately labelled sketch and words.	I can come up with at least one idea about how to create my product. I can take account of the ideas of others when designing. I can produce a plan and explain it to others. I can suggest some improvements and say what was good and not so good about my original design.	I can come up with a range of ideas after I have collected information. I can take a user's view into account when designing. I can produce a detailed step-by-step plan and produce prototypes to show my ideas. I can use cross-sectional planning to show my design.	I can use a range of information (including market research) to inform my design. I can follow and refine my plan if necessary. I can use exploded diagrams to show my designs. I can use computer aided designs to show my ideas.	**Design** Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
Make	I can use equipment and tools accurately. I can stop and think about how good my product is going to end up.	I can show a good level of expertise when using a range of tools and equipment. I can explain how my product will appeal to the audience.	I can explain how my product will appeal to the audience. I can think about the aesthetic qualities of my work. I can think about the functionality of my work.	I can think about the aesthetic qualities of my work. I can think about the functionality of my work.	**Make** Select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately 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	I can say what I would change to make my design even better.	I can evaluate my product against set criteria.	I can evaluate appearance and function against the original criteria. I can test and evaluate my final product.	I can evaluate if different resources would have improved my product. I can practise my evaluation skills by evaluating existing products against criteria which I have set.	**Evaluate** Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals in design and technology have helped shape the world.
Technical Knowledge	**Cooking and nutrition:** I can choose the right ingredients for a product. I can use equipment safely. I can make sure that my product looks attractive. I can describe how my combined ingredients come together.	**Cooking and nutrition:** I can describe what I need do to be both hygienic and safe. I can present my product well. I can explain where and how a variety of ingredients are grown, reared, caught and processed	**Technical knowledge** I can apply my understanding of computing to programme, monitor and control my product.	***Technical knowledge*** ***Electrical and mechanical components*** I can use electrical systems in my product, such as series circuits incorporating switches, bulbs, buzzers and motors. I can use different kinds of circuit in my product. I can think of ways in which adding a circuit would improve my product. I can incorporate a switch into my product.	**Technical knowledge** Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors Apply their understanding of computing to programme, monitor and control their products. **Cooking and Nutrition** Understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed