Cronton C.E. Primary School National Curriculum Coverage for Design Technology		
The National Curriculum for Design and Technology aims to ensure that all primary pupils: • develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world • build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users • critique, evaluate and test their ideas and products and the work of others • understand and apply the principles of nutrition and learn how to cook.		
KS 1		
	Y1	Y2
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	Draw and sketch designs for: Levers and sliders Toy cars Make test pieces for sliders and levers Make test wheels and axels.	Draw and sketch designs for: Healthy Sandwiches Select ingredients for taste, colour and flavour combinations. Roly Poly Toys Explore different types of roly poly and their mechanisms. Make test pieces. Australian Images – textiles and sewing

Make • select from and use a range of tools and equipment to perform practical tasks [for example, 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	Sliders and levers – Measure, cut, join materials using basic techniques. Wheels and axels- Measure, cut, join using basic techniques. Healthy Fruit salad - Selecting foods for colour and flavour combinations. Bridge Cutting techniques for food.	Healthy Sandwiches - Selecting foods for colour and flavour combinations. Bridge Cutting techniques for food. Roly Poly Toys Measure, cut, join using basic techniques. Australian Images – textiles and sewing Select materials, threads, needles.
Evaluate • explore and evaluate a range of existing products • evaluate their ideas and products against design criteria	Perform tests on their finished products: Moving picture card, toy car, fruit salad and evaluate against criteria.	Healthy Sandwiches - Evaluate against their criteria for presentation, taste. Roly Poly Toys Evaluate against their design and how well it performs. Australian Images – textiles and sewing Evaluate sewing techniques, against criteria.
Technical knowledge • build structures, exploring how they can be made	Make a moving picture using sliders and levers Make a toy car using wheels and axels. Know how to re-inforce weaker areas using card or straws.	Roly Poly Toys Make a roly poly toy selecting most appropriate joining techniques. Strengthen weaker areas using appropriate techniques.

stronger, stiffer and more stable • explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.				
Food Technology As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.				
Pupils should be taught to: Key stage 1 • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from.	Healthy Fruit Salad Understanding the healthy plate Selecting appropriate ingredients Using a bridge cut to prepare food.		Healthy Sandwiches Understanding the healthy plate Selecting appropriate ingredients Using a bridge cut to prepare food	
KS 2				
	Y3	Y4	Y5	Y6
Design • use research and develop design	Hand Puppets – Investigate different types of puppets	Pizza – Testing existing products, prepare recipes, plan how to	Sarcophagus – nets and structures – Prepare diagrams and plans	Memory Boxes – Investigate different types of storage boxes and

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	Prepare patterns, diagrams of designs Prepare a plan for assembly. Photo Frames Bridges and Pulleys	prepare. Pop Up Books Investigate toys with CAMS Prepare diagrams and plans of designs. Torches – Investigate torches and their different purposes. Prepare diagrams and plans of designs.	of designs. Moving Toys CAMS – Investigate toys with CAMS Prepare diagrams and plans of designs. Healthy Soup – testing existing products, prepare recipes, plan how to prepare.	containers and their purposes. Design a memory box to a criteria. Moving Puppets Investigate different types of moving puppets. Design a moving puppet to a criteria. Prepare patterns, diagrams of designs. Controllable vehicles Investigate different types of toy cars with circuits. Design a toy car with a motor to a criteria.
Make • select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing],	Hand Puppets Photo Frames Bridges and Pulleys	Pizza Pop Up Books Torches	Sarcophagus – nets and structures Moving Toys CAMS Healthy Soup	Memory Boxes Moving Puppets Controllable vehicles

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 • 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	Hand Puppets – Investigate existing puppet toys and the different types. Evaluate their own product against their design criteria. Photo Frames Investigate existing puppet toys and the different types. Evaluate their own product against their design criteria. Bridges and Pulleys Investigate existing local bridges and the different types. Evaluate their own product against their design criteria. Know some key facts about Isambard Kingdom Brunel and Thomas Telford.	Pizza – Investigate and taste test different pizzas. Pop Up Books – Investigate some existing moving pictures/pop up books and their mechanisms. Test their mechanisms against a critieria. Torches – Investigate a range of torches and their different uses. Test their torch against a criteria. Know some key facts about Alessandro Volta and his circuit.	Sarcophagus – nets and structures Investigate some existing moving pictures/pop up books and their mechanisms. Test their mechanisms against a critieria. Evaluate against their criteria. Moving Toys CAMS Investigate some existing moving pictures/pop up books and their mechanisms. Test their mechanisms against a critieria. Evaluate against their criteria. Healthy Soup Investigate some existing	Memory Boxes Investigate some existing storage boxes and their mechanisms. Test their boxes against a critieria. Evaluate against their criteria. Moving Puppets Investigate some existing moving puppets and their mechanisms. Test their mechanisms against a critieria. Evaluate against their criteria. Controllable vehicles Investigate some existing motor driven toy cars and

			moving pictures/pop up books and their mechanisms. Test their mechanisms against a critieria. Evaluate against their criteria.	their mechanisms. Test their mechanisms against a critieria. Evaluate against their criteria. Learn about IKEA and the designers.
Technical knowledge • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to	Hand Puppets – Starting and finishing seams securely. Photo Frames – Strengthening corners Providing support for free standing frames. Bridges and Pulleys – Joining and strengthening joints and structures. Making working pulleys.	Pop Up Books – levers, sliders, pivots. Strengthening structures and moving parts. Torches – electrical systems and simple circuits.	Sarcophagus – nets and structures: How to strengthen weaker parts of a structure. Moving Toys CAMS- making a working system using CAMS.	Memory Boxes – how to provide support and strength to corners and sides. Moving Puppets – strengthen joints without hindering mobility. Controllable vehicles – electrical circuits

program, monitor and control their products.				
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• 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.		Pizza – Look at existing pizza companies – Dominos, Pizza Hut. Select a variety of different ingredients Know how to safely prepare food stuffs. Understand they need to be baked.	Healthy Soup – Investigate Heinz as a company. Select a variety of different ingredients Know how to safely prepare food stuffs. Understand they need to be heated to cook the ingredients.	