

	Nursery	Reception	Year 1	Year 2	
Mechanisms	Moving picture: Flaps (Aut 2)	Moving picture: Sliders (Spr2)	Moving picture: Levers (Aut2)	Wheels and axles (Spr 1)	Technical knowledge explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. Select from and use a wide range of materials and components, including construction materials , textiles and ingredients, according to their characteristics
	<ul style="list-style-type: none"> Read a variety of flap books to show the purpose and function Choose background/context for picture Choose character for flap picture Choose flap for character to hide behind Use tools effectively to cut out flap Explore different ways to join flap to paper/card (glue, Sellotape etc) on top of character 	<ul style="list-style-type: none"> Investigate 2 different sliding picture mechanisms (across and up and down) Have a go at making 2 different slider mechanisms with a 'guide', slider and picture Share ideas about how slider mechanisms can be used to tell a familiar story Plan own slider moving picture from dinosaur drip story. Including background and character Describe how character moves in picture Use plan to create a moving picture from the dinosaur drip story 	<ul style="list-style-type: none"> Know the three key components of a lever mechanism (load, fulcrum, effort) Investigate how these components work Devise a criteria and design a moving picture using the lever mechanism. Create a background for a moving picture Add the lever and load to the background to make a moving picture Talk about what is happening in the picture and why they have chosen to make it move in the way that it does Use the skills and knowledge of levers to independently design and create moving picture 	<ul style="list-style-type: none"> Investigate wheels and axles in the world around us Explore wheels fixed to an axle and wheels that rotate around an axle Explore how the axle can be attached to the chassis and how this differs depending on whether the wheels are fixed or rotate Investigate how the chassis of a vehicle differs depending on its purpose Design a vehicle (model) with a purpose in mind. Make a vehicle using their design criteria Evaluate product and the work of peers 	
Structures	Fairy Bed (Spr 2)	Boat (Spr 1)	Chair for Baby Bear (Spr 2)	Slide prototype (Aut 2)	Technical knowledge Build structures, exploring how they can be made stronger, stiffer and more stable Select from and use a wide range of materials and components, including construction materials , textiles and ingredients, according to their characteristics
	<ul style="list-style-type: none"> Select/adapt materials that are the correct shape and size for a 'fairy' bed Collectively create a criteria for fairy bed including: small, strong, comfortable and the right shape Can select and add materials to make the bed strong and comfy Can add creative ideas to their design eg, tent, slide etc 	<ul style="list-style-type: none"> Select appropriate materials for boat Predict which materials will float or sink Investigate how the shape and structure of boats affect the way they move Create a criteria for boat: It needs to be waterproof, it needs to float, carry passengers and move smoothly (not capsized) Design a boat with waterproof material, material that floats, flat base, secure sides Explore how to join materials effectively Make a boat following a criteria Test the boat and evaluate its success 	<ul style="list-style-type: none"> Investigate a variety of chairs and discuss their characteristics and structures. Identify key features of a chair Experiment with joins and materials that would be appropriate for chair features Design a chair following a criteria. Including materials and how they will join effectively Add features to design considering the user (rainbow for child, cushion for comfort) Make their chair following their plan Reflect upon their product and make suggestions for any changes they would make 	<ul style="list-style-type: none"> Investigate 3 structural components of a slide: A way up, a smooth way down, strong support. Experiment and practise joining materials effectively at an angle Experiment with ways to strengthen these joins to create a supported stand alone structure Select materials and plan how to make their slide unique (tunnels, poles, netting etc), thinking about their user. This may involve some amendments to their structure Follow plans to create their slide including additional features Evaluate structural soundness and creative features of final model and make suggestions for improvements 	
Food	Fruit Salad (Sum 2)	Salad (Sum 2)		Wraps (Aut 2)	Understand and apply the principles of nutrition and learn how to cook. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients , according to their characteristics
	<ul style="list-style-type: none"> Know some of the places that fruit comes from (plants, trees then to shops) Express a taste preference and select 3 favourite fruits Use simple language to respond to taste and texture of different fruits Chop some soft fruits safely for fruit salad 	<ul style="list-style-type: none"> Understand how to make healthy food choices Explore a greater variety of adjectives to describe edible plants (taste, texture and appearance) Why it is important to wash fruit and vegetables before eating Plan a salad using preferred ingredients Prepare ingredients including tearing, chopping and Understand basic food hygiene including washing hands, hair back, clean surfaces and tools Prepare a salad safely Taste and evaluate salad 		<ul style="list-style-type: none"> Visit the lunch hall to investigate the ingredients the kitchen staff use in the lunchtime wraps Recognise and observe how the different ingredients are prepared Investigate how to snip, chop and grate safely and effectively Describe taste and textures and suggest complimentary flavour combinations Design packaging for a wrap with a user in mind Design a wrap thinking about the criteria Make wrap and packaging following a plan and design criteria. 	
Textiles		Weaving (Sum1)	Hand puppets (Spr 1)		Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
		<ul style="list-style-type: none"> Understand purpose of a blanket Choose suitable materials for a blanket Know that fabrics can be recycled Design a blanket Weave using paper (weave and weft) Weave with fabric Evaluate against criteria 	<ul style="list-style-type: none"> Explore collection of puppets and investigate how they work Mark, cut and join 2 identical pieces of fabric Use tools and equipment safely Develop a criteria to design a hand puppet Write a list of tools & materials needed to make a design Join 2 pieces of fabric safely to make a hand puppet Cut out and shape materials to make puppet look like the story character in design Use tools and equipment safely 		