DT progression of knowledge and skills

Level expected at the end of EYFS(ELG)

- Safely use & explore a variety of materials, tools & techniques, experimenting with colour, design, texture, form & function
- Share their creations, explaining the process they used

KS1 National curriculum expectations

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

- 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

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria
- Technical knowledge
- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

	Nursery	Reception	Year 1	Year 2
Cooking and nutrition	Throughout the year making biscuits – cutting using a pastry cutter Making toast/bagels and spreading butter	Design Choosing vegetables crudities Client: Make a crudities for a pirate	**Design** Design pasta salad for your healthy side dish. Client: To make a pasta salad for baby bear.	
		Make To make a crudities by cutting e.g. pepper, cucumber and celery. Skills: Healthy choices and safe cutting	**Make** To make a pasta salad. To peel, chop, grate and slice vegetables or fruit. To measure in cups, the correct amount of pasta. **Skills** Healthy choices, peel, slice, chop, grate, mix, measure	
		Evaluate What's the best way to cut a vegetable for a dip?	Evaluate Does it look tempting? Were there any difficulties? How can I make it better next time? Would you use different tools to cut your vegetables?	
		Technical Knowledge	Technical Knowledge	

		Learning to cut using a knife	Using a knife safely Practice using a knife to chop and slice	
	Nursery	Reception	Year 1	Year 2
Mechanisms	Design/Make Joins 2 materials, paper, card, feathers, wood, plastic using glue and tape	Design/make Design a flap book with a sliding picture. To design and make a flap book with a slider by making a cut in the flap book and joining a picture to a lolly stick.	**Design/make** To design a diorama for dinosaurs and a mechanism to make the dinosaurs move. To create and join materials to make a moving dinosaur using a slider and lever.	Design/make To design a bus to go on a journey. To design a bus using wheels and axels.
		Skills Cutting paper. Joining material with a lolly stick.	**Skills** Cutting and making a slider and lever	**Skills** Cutting and joining to allow movement using paper, card, plastic and wood according to their characteristics.
		Evaluate Can your slider move? What did you like about your flap book?	Evaluate Does your diorama have a moving dinosaur? What did you like about your friend's diorama? How would you make it better next time? Is there a different material we can use to make our diorama better?	Evaluate Evaluate their ideas throughout and their product against the original criteria. Does your bus move? Have you used a wheel and axel correctly? Would you use different materials next time and why? Did your design reflect the product you made?
		Technical Knowledge explore and use mechanisms [for	Technical Knowledge explore and use mechanisms [for	Technical Knowledge Explore and use mechanisms [for

		example, levers, sliders, wheels and axles], in their products.	example, levers, sliders, wheels and axles], in their product.	example, levers, sliders, wheels and axles], in their product.
	Nursery	Reception	Year 1	Year 2
Structures	Explore various construction kits to make bridges, cars, houses, rockets and castles.	Design/make Designing what a bridge would be like for the ginger bread man.	**Design/make** To design and make a castle for Rapunzel and her prince.	Design/make To design and make a bridge for a car to go over or a bridge to go under.
		Skills To design and make a bridge using different constructions, joining and building a secure bridge.	**Skills** To design and make a castle using joining using tape, glue and joints to attach turrets, flags, towers, drawbridge and a window to your two tier castle.	**Skills** To join columns to a bridge to make a steady bridge that a vehicle could travel over. To explore different prototypes to find a steady bridge by considering the distance between columns and the height to support it.
		Evaluate Does your bridge have a construction or join?	Evaluate Does your castle stand strong? Does your castle look like your design? Will	Evaluate Is your bridge steady? Is it strong?

		What did you like about your flap book? How would you make it better next time?	your castle fall over on a flat surface?	Does it need to be stiffer? Is your bridge stable? Does your final bridge look like your design?
		Technical Knowledge To make a sliding mechanism. Build structures, exploring how they can be made stronger, stiffer and more stable.	Technical Knowledge To make a strong structure that can stand by itself. Build structures, exploring how they can be made stronger, stiffer and more stable.	Technical Knowledge To make a steady structure: a bridge. Build structures, exploring how they can be made stronger, stiffer and more stable.