Elton Primary School and Nursery
Design Technology Overview from 2020

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery/ Reception	EYFS FRAMEWORK					

Key Stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

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

Year 1	**Lost and Found** Design and make a sandwich for the journey Build a boat- junk modelling-	**Nibbles**	**The Lion Inside** Design and make an animal mask. Select tools: cutting, shaping, joining, finishing select materials	**The curious case of the disappearing mammoth**	**Toys in Space** Design, Test, make boats/rocket i.e. Whose rocket can travel the furthest? Which materials/shape boats float?	**Goldilocks and just the one bear**

Year 2	Troll Swop	The owl who was afraid of the dark Create a fat ball to feed an owl Evaluate existing products. Design and make task.	Dragon Machine Designing and make a functional machine exploring a range of materials to support written stories Pre-links to using levers/sliders wheels	Great Fire of London Major Glad and Major Dizzy Moving Toys – design and make Levers/sliders/wheel axles	The Last Wolf	Grandad's secret giant

Key Stage 2

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

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

select from and use a wider range of tools and equipment to perform practical tasks [for example, 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

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

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 program, monitor and control their products

Year 3	**Seal Surfer**	**Winter's Child** Snow scene in a box – focus on cutting, joining, shaping, finishing Selecting range of materials	**Stone Age Boy/Snow Dragon**	**Big Blue Whale**	**Journey** Structures Design and make a bridge to cross to the citadel.	**Zereffa Giraffa** **T**extiles Design and make a bag with a Giraffe
Year 4	**Gorilla**	**Leon and the place between** Fairground game or mechanical toy. Using simple gears, pulleys cams, levers and linkage	**Escape from Pompeii** Build a model volcano.- generate ideas, develop, communicate, create sketches and exploded diagrams	**When the giant stirred** Design and make a model an escape raft. Test and evaluate	**Where the forest meets the sea** Rainforest fruit salad – evaluate/food taste existing food product. Design make and evaluate own Fruit salad.	**Blue John**
Year 5	**Queen of the Falls** Events and individuals in Design and Technology in 1900S who have shaped events/developed ground breaking products (barrel builders/boat designers/Wright Brothers/Structural Engineers/steam engine) Structures/Mechanisms	**The Lost Happy Endings**	**Arthur and the Golden Rope** Super Hero Granola/Snack Pot/Energy Bar Food Tasting - evaluating preparation, making, evaluation. Food	**The Darkest Dark** Programming own moving spaceship/model – link to Lego technic	**The Paper Bag Prince**	**The Hunter**
Year 6	**Star of Hope, Star of Fear**	**Can we save the Tiger?** Moving shadow puppets	**The Selfish Giant**	**Jemmy Button** Design a light system for underwater diving.	**Manfish**	**Sky Chasers** Textiles – _design own t-shirts which

		Mechanism/levers		Electrical control/testing materials – i.e. waterproof covering/on/off switches/buzzer alert		show your identity (batik, patchwork, tie dye)