

Progression ladder DT

UKS2	I can use cams to convert a rotary motion to a linear motion.
	I can create a moving vehicle using a motorised mechanism attached to an axle
	I can use circuits that include at least two components to create a moving 'ride' using a motorised mechanism and lights.
	I can join wooden parts together to make them structurally sturdy.
	I can cut materials with precision and refine the finish with appropriate tools such as a sander.
	I can create cross-sectional diagrams to create a design.
	I can accurately measure and calculate ratio of ingredients to scale up and down from a recipe.
LKS2	I can use pneumatic systems to create a monster.
	I can use an electronic system within a product.
	I can create a simple tapestry using a variety of stitches
	I can use scientific knowledge of levers and transference of forces to choose an appropriate mechanism
	I can cut materials with accuracy to the nearest mm
	I can describe my product using an accurately labelled diagram.
	I can follow a recipe
KS1	I can create a product using a wheel and an axle.
	I can make a simple moving toy using paper and joining and cutting techniques.
	I can use a range of cutting and shaping techniques such as tearing, cutting and folding.
	I can use materials to practise drilling, screwing, gluing and nailing materials to strengthen products.
	I can cut materials with accuracy to the nearest cm
	I can make a basic structure using simple strengthening techniques such as gluing and combining materials to strengthen.
	I can show an understanding of safety when cooking ingredients.
EYFS	I can manipulate materials to achieve a planned effect.
	I can construct with a purpose in mind, using a variety of resources.
	I can use simple tools and techniques competently and appropriately.
	I can select tools and techniques needed to shape, assemble and join materials I am using.

STEM	Knowledge builder / Skills ladder DT
KS1	Food technology
	To use paper to create moving pictures
	To select correct materials to make a kite that flies
	To make a car garage with a strong structure and fulfilling a design brief
	To understand hand hygiene
LKS2	Food technology
	To use junk material to build a simple bridge
	To create a simple pop up book
	To make a torch using a variety of circuits and for a variety of purposes
	To understand tooth hygiene
UKS2	Food technology
	To build a specific type of bridge to hold a weight – arch, suspension, truss
	To use invisible joining stitches to make a ‘cushion’

	To create a story book using a moving mechanism
	To use a variety of switches to create a burglar alarm
	To understand the importance of personal hygiene