

Design & Technology Progression Map



<u>Years 1 – 6</u>

	Autumn	Spring	
Year 1	Autumn 1 – Where I Am – Use of Materials	Spring 1 – My Amazing Body – Mechanisms	Summer 1
0	Children working at the expected standard:	Children working at the expected standard:	Children working at t
John's Carlin	I can make a simple plan and talk about my ideas.	I can give some answers to questions.	Know and can talk abo
	I can join materials together, cutting and gluing to make a model.	I can experiment at using different materials and find ways to join them.	Can show which foods
School School	I can talk about how model and how I made it.	I can talk about how to adapt a mechanism.	Of.
	I can talk about my structure and show how it could be improved.	I can follow instructions and cut out a template.	Can talk about the text
	Children working at greater depth:	I can attach materials so that they move using split pin. I can say what I am pleased with and what worked well in my design. I can say	Can say what worked v
	I can adapt, correct or extend my own understanding with independence to	how I could improve my work	Children working at g
	make improvements.		Work with resilience at
	I can begin to give more detailed reasons for my suggestions.	Children working at greater depth:	Link learning from prev
	I can use my knowledge from previous learning to enhance my design.	I can explain in detail my understanding to a partner.	Can use words with acc
	I can apply a high level of confidence, work with consistency of purpose and	I can work and not give up showing accurate detail.	Can give reasons why
	show good resilience when creating my model.	I can use ambitious vocabulary and talk confidently about my learning.	Independently make im
	I can use oracy to give more detailed reasons to evaluate my work	I can correct mistakes and talk about improvements as I go along.	Can show how and why
			Sum
			Children working at th
			I can investigate how p
			I can imagine ideas with I can plan out my own i
			I can assemble resource
			I can evaluate my finish
			I can say what I like and
			Children working at g
			I can give reasons why
			I can adapt, correct or e
			I can explain my unders
			giving reasons to say w
			I can explain my under
			giving more detailed rea
Year 2	Autumn 1 – Lord Lever & Port Sunlight – Use of Materials and	.Spring 1 – Owl Who Was Afraid of the Dark – Mechanism &	Sum
	Construction	<u>Construction</u>	Children working at
John's Carling	Children working at the expected standard:	Children working at the expected standard:	I can talk about how a
The school	I can talk about how a box is assembled.	I can make components move in simple ways. Discuss how to alter and	I can try different tech
	I can unpick a box and find a net shape.	improve designs.	I can measure with a
	I can reassemble a net to make a box.	I can make a plan showing my choices of design and reasons for these.	whole showing how the
	I can cut and score card.	I can make a moving owl which has some design features on.	I can explain how we
	I can fold and join to make a box form a net.	I can explain how well my design worked and give reasons for this. I can	this. I can show any c
	I can talk about how to improve my work	show any change to make for the future.	Children working at
	I can talk about how my box works and if it meets the design brief.		I can adapt, correct o
	I can say what I am pleased with and how it could be improved.	Children working at greater depth:	to investigate differen
		I can use oracy effectively to enhance my work when using more than	I can apply a high lev
	Children working at greater depth:	one mechanism.	tasks seem demandi
	I can work with confidence and resilience to reassemble box with	I can accurately and effectively link learning from previous lessons to	I can apply knowledg
	accuracy and care.	create an owl.	with security and acc
	I can apply high level of confidence and show good resilience when	I can apply knowledge, skills and understanding from previous learning	
	tasks seem demanding.	with security and accuracy without the teacher and add additional	<u>Su</u>
	I can use accurate subject vocabulary when talking about design –	moving features using my own ideas to good effect.	Children working at
	design brief, evaluate, enhance	I can adapt, correct and extend my own understanding with	I can make choices b
		independence.	I can design a label for
	Autumn 2 – Remembrance and Remembering - Textiles		my fruit juice pirate p
	Children working at the expected standard:		l my fruit juice pirate po l can evaluate.

Summer

r 1 – Down on the Farm – Cooking & Nutrition the expected standard: bout food hygiene. Know why the rules are important.

Is I should eat plenty of and which foods I should eat less

ture of food, use utensils safely to prepare soup. well and talk about how it could be improved.

greater depth:

at practical activities working with care.

vious lessons to explain why soup is nutritious.

ccuracy - contamination etc

y some food groups are better than others.

mprovements and work with accuracy.

hy I made improvements.

hmer 2 – The History Box – Construction the expected standard:

puppets are made.

ith a partner.

ideas.

rces to make a puppet.

shed puppet.

nd how I would like to improve my design.

greater depth:

y some ideas may work better.

r extend my own understanding with independence.

erstanding to others and be a learning buddy to others by why some ideas are better than others.

erstanding to others and be a learning buddy to others by eason for their comments.

mmer 1 - Lighthouses - Construction at the expected standard:

v a frame has been put together.

chniques to join a fame and say which works best. accuracy, use a saw safely. Joins parts to make

they added strength to the design

vell my picture frame worked and give reasons for v change to make for the future.

at greater depth:

or extend my own understanding with independence ent joining techniques.

evel of confidence and show good resilience when ding.

lge, skills and understanding from previous learning curacy without the teacher.

ummer 2 – Pirates on Tour – Food

at the expected standard:

based on flavour.

for my fruit juice and follow the instructions to create potion.

at greater depth:

	I can join materials in different ways and wo I can evaluate mine and my peers' sewing s develop this skill next time. Children working at greater depth: I can apply high level of confidence and sho tasks seem demanding. I can adapt, correct or extend my own under independence.	skills and identify ways to		ingredients and utensils.	asoning for my juice choice. d work with accuracy when handling ain how I would improve my flavour and
	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5
Year 3	Port Sunlight – Food – Eating Seasonally I can prepare myself and a work space to cook safely I can understand the basic rules to avoid food contamination I can follow the instructions within a recipe I can understand safety rules for using, storing and cleaning a knife safely	<u>The UK – Textiles - Cushions</u> I can select and cut fabrics using fabric scissors I can thread needles I can tie knots I can sew using cross stitch to join fabric I can decorate fabric using applique	Rivers and Mountains – Digital World – Electronic Charm I can use a template to cut and assemble a pouch I can select and use the appropriate tools and equipment for cutting, joining, shaping and decorating I can apply functional features to my design	Stone Age – Mechanical Systems – Pneumatic Toys I can create a pneumatic system to create a desired motion I can build secure housing for a pneumatic system I can use syringes and balloons to create different types of pneumatic systems I can manipulate materials to create different effects (cutting, creasing, folding, weaving) I can explain how pneumatic systems operate by drawing in, releasing and compressing air	Ancient Egypt – Structures – Constructing a Castle I can construct a range of 3D shapes using nets I can understand that wide and flat based objects are more stable I can understand the importance of strength and stiffness in structures
Year 4	Habitats – Mechanical Systems – Making a Slingshot Car I can measure, mark, cut and assemble with increasing accuracy I can make a model based on a chosen design	<u>Antarctica – Food – Adapting a Recipe</u> I can adapt a recipe I can understand a variety of cooking techniques (sieving, creaming, rubbing, cooling)	The Romans – Structure - PavilionsI can create a range of different shaped framestructuresI can create a free stranding frame structureI can select appropriate materials to build a strongstructureI can reinforce corners to strengthen a structureI can create different textural effects with materials	The Vikings – Textiles - Fastenings I can make and test a paper template with accuracy I can measure, mark and cut fabric using a paper template I can select a stitch style to join fabric I can incorporate fastening to a design	Refugees – Electrical Systems - Torches I can make a torch with a working electrical circuit and switch I can use appropriate equipment to cut and attach materials
Year 5	Space – Mechanical Systems – Pop-Up Book I can make mechanisms and structures using slides, pivots and folds to create movement I can use layers and spacers to hide the workings of mechanical parts I can explain that mechanisms can be used to change one kind of motion into another	Liverpool – Structures - Bridges I can make a range of different shaped beam bridges I can use triangles to create truss bridges I can build a wooden bridge structure I can measure and mark wood accurately I can use the correct techniques to saw safely I can identify where a structure needs reinforcement	Benin – Food – What Could Be Healthier? I can cut and prepare vegetables safely I can use a range of equipment safely (knives, hot pans, hobs) I can understand how to avoid cross-contamination I can follow a step by step method carefully	<u>North and South America – Digital World –</u> <u>Monitoring Devices</u> I can understand the functional and aesthetic properties of plastics I can program to monitor the ambient temperature and code an alert	The Victorians – Electrical Systems – Doodlers I can make a functional series circuit I can map out where different components of the circuit will go
Year 6	WW2 – Electrical Systems – Steady Hand Game I can construct a stable base for a game I can accurately cut, fold and assemble a net I can make and test a circuit, incorporating it into a base	Syria – Structures - Playgrounds I can measure, mark and cut wood to create a range of structures I can use a range of materials to reinforce and add decoration to structures I can manipulate materials and shapes to strengthen structures	Evolution and Inheritance – Mechanical Systems – Automata Toys I can measure, mark and cut components accurately I can assemble components accurately to make a stable frame I can secure the joints of the frames at right angles I can select appropriate materials		Coasts – Digital World – Navigating the WorldI can consider materials and their functionalproperties, especially those that are sustainable andrecyclableI can explain material choices and why they werechosen as part of a product conceptI can program an N, E, S, W cardinal compassCoasts – Food – Come Dine With MeI can measure out and use the correct quantitieswhen following a recipeI can work safely and hygienically withindependence