A designer at Huncote- Design and technology long term plan 2024-2025

		Autumn	Spring	Summer
EYFS	Title	Food- making vegetable soup	Junk modelling- A boat that will	Textiles- Sewing Skills
			float	
	Development	PD- Develop their small motor skills so	EAD- Explore, use and refine a variety of	PD- Develop their small motor skills so
	Matters links	that they can use a range of tools	artistic effects to express their ideas and	that they can use a range of tools
		competently, safely and confidently. Suggested tools: pencils for drawing and	feelings. • Return to and build on their previous learning, refining ideas and	competently, safely and confidently. Suggested tools: pencils for drawing and
		writing, paintbrushes, scissors, knives,	developing their ability to represent them.	writing, paintbrushes, scissors, knives,
		forks and spoons.	• Create collaboratively, sharing ideas,	forks and spoons.
			resources and skills	
	Prior/Future	Future Learning - Children will experience	Prior Learning- Children will have access	Prior Learning includes threading
	Learning	handling food preparation in Years 1 & 2.	to junk modelling opportunities within the continuous provision.	activities. <mark>Future learning</mark> in KS1 & KS2 involves further sewing skills linked to
	_		Future Learning- Children will build on	textile projects.
			their junk modelling skills in Year 1 & 2.	p. sjessa i
	Key	Chop, grate, slice, peel, vegetables, skin,	Join, fix, float, strong, attach, construct,	Stitch, thread, needle, up and down,
	Vocabulary		build, persevere	knot.
	Lesson	I am learning where vegetables come	I am learning how to join materials	I am learning how to use and handle a
	Objectives	from.	together	needle
	J	I am beginning to learn how to prepare vegetables	I am learning how to use different materials	I am learning how to hold the material
		I am beginning to understand how to use	I am learning to discuss my ideas	I am learning how to use running stitch by 'up the hole and down the hole'.
		a knife safely	I am learning to persevere until the	I am learning to use running stitch
		I am beginning to try new foods	project is complete	confidently
	Other ideas	Link to pumpkin soup story by Helen	This lesson links to children learning	N/A
		Cooper	about Niagara Falls.	
			Science- Floating and Sinking	

		Autumn	Spring	Summer
Year	Title	Unit 1 - Textiles:	Unit 2 – Structures	Unit 3 - Cooking and Nutrition:
1		Our Fabric Faces	Castles	Dips and Dippers
•				(Twinkl Plan It Unit available)
		(Twinkl Plan It Unit available)		
	National	Use of materials, sewing techniques,	Building a structure	Understanding food sources, basic cooking
	Curriculum	design, make, evaluate.		skills.
	Links			
	Links to	Prior learning in EYFS with threading	Prior Learning Builds on basic cutting and	Prior Learning- Children will have
	Previous or	activities and sewing using Binka.	joining skills and junk model experiences	experienced preparing vegetables for their
	Future		in EYFS	Autumn Soup in EYFS.
	Learning	Future Learning Introduction to basic	Future Learning will include more complex	T
		sewing skills; future use in more complex	structures	Future Learning Introduces basic food
		textiles projects.		preparation; future projects will include
	Vari	Fabric, needle, thread, sew, stitch, button,	design, evaluate. construct, stable, strong,	more complex cooking tasks.
	Key	design, evaluate.	moving parts	Fruit, vegetable, chop, peel, mix, hygiene, healthy, evaluate.
	Vocabulary	3 '	.	
	Lesson	I am learning to identify where different stitches have been used on textile	I am learning to identify the parts of a castle	I am learning to identify different fruits and vegetables and how they are grown.
	Objectives	materials.	I am identifying the 3D shapes that help	I am learning to express my likes and
		I am learning to identify different types of	to make up a castle	dislikes about available dips and dippers.
		fabric.	I am learning different ways of joining	I am learning to wash fruits and
		I am learning to thread a needle and tie	materials	vegetables properly.
		a knot.	I am learning to identify the moving parts	I am learning to use a knife safely to
		I am learning to sew a button onto	of a castle	chop fruit and vegetables.
		fabric.	I am learning to plan my design	I am learning to peel fruit and
		I am learning to use basic stitching	I am learning to follow my plan and	vegetables safely.
		techniques (running stitch)	adapt my ideas where necessary	I am learning to mix ingredients to
		I am learning to design my own fabric	I am learning to evaluate my finished	make a dip.
		face.	castle and suggest improvements	I am learning to evaluate the taste and
		I am learning to evaluate my finished		presentation of my fruit salad.
	0.1 .1	product.	I I a a chamala a mha a maile a mar chamala a maile	Discount de la constant de la consta
	Other ideas	Use recycled materials where possible.	Use storybooks or characters to make	Discuss the importance of healthy eating.
		Introduce simple patterns for students to follow:	moving pictures more engaging.	Encourage children to try foods (dips) they haven't eaten before.
/0a = 1 ·	rill alcarood the	_ jouow. e opportunity to make a moving picture, this o	can be evaluated in a Christman card	invertiener begore.

ur r will also need the opportunity to make a moving picture, this can be explored in a Christmas card.

- **Levers and sliders**

		Autumn	Spring	Summer
'ear	Title	Unit 1 - Textiles: Bunting Twinkl Plan It Unit Available	Unit 2 - Mechanisms: Wheels and Axles Moving cars	Unit 3 - Cooking and Nutrition: Sandwiches
	National Curriculum Links	Use of materials, sewing techniques, design, make, evaluate.	Understanding mechanical systems.	Understanding food sources, basic cooking skills.
	Links to Previous or Future Learning	Prior Learning builds on EYFS/Year 1 sewing skills; Future projects will include more complex textiles projects.	Prior Learning builds on Year 1 mechanisms; future projects will include more complex mechanisms.	Prior Learning-builds on Year 1 cooking skills; Future projects will include more complex cooking tasks.
	Key Vocabulary	Fabric, needle, thread, sew, stitch, puppet, design, evaluate.	Wheel, axle, chassis, motion, rotate, design, evaluate.	Bread, butter, spread, knife, filling, healthy, hygiene, evaluate.
	Lesson Objectives	I am learning to choose appropriate fabric for my project. I am learning to cut fabric to a pattern. I am learning to sew fabric pieces together. I am learning to add features using different materials. I am learning to use sewing stitches as a feature. I am learning to design my own bunting. I am learning to evaluate my finished bunting.	I am learning to identify different parts of a wheeled vehicle. I am learning to attach wheels to an axle. I am learning to create a chassis for my vehicle. I am learning to design a wheeled vehicle. I am learning to construct my design using wheels and axles. I am learning to evaluate my vehicle for functionality.	I am learning to identify different types of bread. I am learning to spread butter or margarine on bread. I am learning to choose healthy fillings for my sandwich. I am learning to assemble a sandwich. I am learning to cut a sandwich safely. I am learning to evaluate the taste and presentation of my sandwich.
	Other ideas	Use simple patterns and templates. Encourage creative use of decorations.	Use toy cars as examples to see how wheels move. Incorporate races to test the vehicles.	Discuss the importance of balanced meals Encourage creative sandwich designs. A tea party to taste/celebrate the different sandwiches.

Year 2 will also need to experience 'structures', this could be covered in the Summer term through testing, designing and making paper aeroplanes as part of local history looking at flight.

		Autumn	Spring	Summer
Year 3	Title	Unit 1 - Textiles: Making a Purse	Unit 2 - Mechanisms: Levers and Linkages Roman Catapult	Unit 3 - Cooking and Nutrition: The Great Bread Bake Off (Twinkl Plan It Unit available)
	National Curriculum Links	Use of materials, sewing techniques, design, make, evaluate.	Understanding mechanical systems.	Understanding food sources, basic cooking skills.
	Links to Previous or Future Learning	Prior Learning- Builds on basic sewing skills from EYFS and KS1; future projects will include more complex textiles projects.	Prior Learning- Builds on basic mechanisms from KS1; future projects will include more complex mechanical systems.	Prior Learning- Builds on basic cooking skills from KS1; future projects will include more complex cooking tasks.
	Key Vocabulary	Fabric, needle, thread, sew, stitch, button, design, evaluate.	Lever, linkage, pivot, motion, force, design, evaluate.	Bread, flavour, texture, taste, knead, mix, hygiene, evaluate.
	Lesson Objectives	I am learning to identify the purpose of a purse and their features. I am learning to choose appropriate fabric for my purse. I am learning to cut fabric to a pattern. I am learning to sew fabric pieces together using different stitches. I am learning to attach a button or fastener. I am learning to design and label my own ideas for a purse. I am learning to evaluate my finished purse.	I understand the purpose and the history of Roman catapults I am learning to investigate different types of levers and how they work. I am learning to design a simple catapult considering materials and tools. I am learning to develop practical skills by building the catapult. I am learning to test and evaluate the constructed catapults.	I am learning to identify ingredients for bread. I am learning to measure and mix ingredients. I am learning to knead dough properly. I am learning to let dough rise. I am learning to bake bread safely. I am learning to evaluate the taste and texture of my bread.
	Other ideas	Introduce decorative stitching techniques. Use recycled materials.	Links to Romans in History	Discuss the science behind bread rising. Include taste tests to evaluate bread products. Also, the history of Warburtons in covered in this unit

		Autumn	Spring	Summer
Year	Title	Unit 1- Cooking and Nutrition: Sweet	Unit 2 - Textiles: Cross-Stitch and	Unit 3- Battery operated
4		Dishes	Applique	light/mechanisms
•		Adapting a recipe	Book Sleeve	
		Biscuit recipe	Kapow Unit available	
•				Twinkl Unit available
	National	Understanding food sources, basic cooking	Use of materials, sewing techniques,	Understanding the use of electrical
	Curriculum	skills.	design, make, evaluate.	systems in their products
	Links			
	Links to	Builds on basic cooking skills from KS1	Builds on basic sewing skills from KS1	Builds on Links to Science from Spring
	Previous or	and Year 3; <mark>future projects</mark> will include	and Year 3; <mark>future projects</mark> will include	Term and mechanisms in Year 3.
	Future	more complex cooking tasks.	more complex textiles projects.	Future projects include Animal Automata
	Learning			in Year 5.
	Key	Biscuit recipe, audience, packaging,	Cross-stitch, applique, fabric, needle,	Circuit, switch, battery, wire, criteria,
	Vocabulary	flavouring, design, evaluate	thread, sew, stitch, design, evaluate.	technology
	Lesson	I am learning to identify a range of	I am learning to create a cross-stitch	I learning to explain how key events and
	Objectives	biscuits and note who they are aimed at	pattern.	individuals in design and technology have
		I am learning to identify the ingredients	I am learning to use cross-stitch to	helped shape the world.
		within a biscuit	decorate fabric.	I am learning to make and represent
		I am learning to follow a design criteria	I am learning to create an applique	different types of circuits.
		for example-	design.	I can make and use switches
		You must design and make a biscuit	I am learning to attach applique pieces	I can develop design criteria and a design
		aimed at children 5-7 years old I am learning to plan my biscuit	to fabric using stitching. I am learning to design a decorative	I can develop and communicate a design for my light.
		flavouring	fabric piece using cross-stitch and	I can select materials and components to
		I am learning to plan my biscuit	applique.	make my light.
		packaging	I am learning to evaluate my finished	I can evaluate my finished product.
		I am learning to evaluate my finished	piece.	I can't evaluate may junative a produces
		product.		
	Other ideas	Discuss the importance of balanced meals.	Use simple cross-stitch patterns.	
		 s element to their design curriculum. This coul	Encourage creative applique designs.	

		Autumn	Spring	Summer
Year	Title	Unit 1 Structures	Unit 2- Mechanisms	Unit 3- Food
5		Marblicious	A pop-up book for EYFS	Seasonal Salad
		Twinkl Unit available	Kapow unit available	Twinkl unit available
	National	Applying my understanding of how to	Understand and use mechanical systems	-Prepare and cook a variety of
	Curriculum Links	strengthen, stiffen and reinforce complex structures	in their products.	predominantly savoury dishesUnderstand the source, seasonality, and characteristics of a broad range of ingredients.
	Links to	Previous learning in EYFS (boats), Year 1	Previous learning- all children from Year 1	Previous learning- all year groups have
	Previous or	(castles), Year 2 (paper airplanes), Year 4	will have looked at mechanisms.	experienced cooking and preparing food
	Future		Future learning- Year 6 2ill look at animal	Future learning- In year 6 children will
	Learning		automata.	experience savoury dishes again.
	Key	Structure, components, Free standing,	Design, input, motion, mechanism,	Seasonal, protein, proportions, reared,
	Vocabulary	support, stiffen, sturdy, stable, reposition,	criteria, research	processed,
		strengthen, reinforce.	Reinforce, model	
	Lesson	I am learning to investigate free standing	I am learning to investigate pop-up books	I can explain what seasonality means
	Objectives	structures	that are currently available	and know when different fruit and
		I am learning to apply my understanding	I am learning to design and plan a pop-	vegetables are in season in the United
		of structures. • I am learning to use a wider range of	up book I am learning to name each mechanism	Kingdom. I can explain where, when and how a
		tools and equipment to perform practical	feature and how they will work in my	variety of ingredients are reared, caught
		tasks accurately.	design	and processed.
		I learning to develop a range of practical	I am learning to follow my plan and	I can taste and evaluate seasonal foods
		skills to create bends.	make a pop up book	and recognise that sometimes we need to
		I am learning to select from and use	I am to use layers and spacers to cover	try a new food a few times to find out if
		materials and components to make a	the working of mechanisms	we like it
		marble run I am learning to evaluate and improve my	I am learning to evaluate my finished product	I can explain the importance of protein as a proportion of a healthy varied diet
		design and technology work.	I am learning to share my finished	I can work as a group to generate,
		wangir war teer to bogg work.	product with the intended audience.	evaluate and refine recipe ideas.
			1	I can take feedback and improve my
				designs
				I can explain how to correctly store and
				handle meat and fish. • I can prepare,

			cook and evaluate a healthy seasonal meal.		
	Other ideas		This unit also links to nutrition		
			which is covered in Year 3.		
Year	Year 5 need to incorporate a sewing project during the year to build on previous skills.				

		Autumn	Spring	Summer
Year	Title	Unit 1- Automata animals	Unit 2 - Cooking and Nutrition:	Unit 3 - Textiles: Designing and Making a
6		Mechanical systems	International Cuisine	Tote Bag
		Twinkl Plan it Unit available	Mexican Tortillas	
	National	Understanding mechanical systems.	Understanding food sources, cooking	Use of materials, sewing techniques,
	Curriculum		skills, cultural awareness.	design, make, evaluate.
	Links			
	Links to	Builds on mechanisms from previous	Builds on cooking skills from previous	Builds on sewing skills from previous
	Previous or	years; final mechanical project before	years; final cooking project before	years; final textiles project before
	Future	secondary school.	secondary school.	secondary school.
	Learning			
	Key	Mechanism, cam, follower, gear, pulley,	Cuisine, ingredients, chop, mix, cook,	Fabric, needle, thread, sew, stitch,
	Vocabulary	motion, design, evaluate.	hygiene, evaluate, flavours,	clothing, design, evaluate.
	Lesson	I am learning to research ideas about	I am learning to identify ingredients	I am learning to choose appropriate
	Objectives	different animals to inform my design	from different cuisines.	fabric for my tote bag
	1	I am learning to explain how simple cam	I am learning to wash and prepare	I am learning to cut fabric to a pattern.
		mechanisms work.	ingredients.	I am learning to sew fabric pieces
		I learning to select materials according to	I am learning to use a knife safely to	together to make a bag.
		their functional properties.	chop ingredients.	I am learning to add fasteners to my
		I am learning to use research and develop	I am learning to mix and cook	bag.
		design criteria to inform my design.	ingredients to create a dish from a specific	I am learning to design my own bag.
		I learning to build a framework,	cuisine (Mexican)	I am learning to evaluate my finished
		accurately using a wider range of tools	I am learning to present my dish	item.
		and equipment	attractively.	
		I learning to understand and use a	I am learning to evaluate the taste and	
		mechanical system	presentation of my dish.	

	I am learning to evaluate my finished		
	product		
Other ideas	Use real-world examples of complex	Discuss cultural significance of different	Encourage use of recycled materials.
	mechanical systems. Encourage creativity	cuisines. Include taste tests to evaluate	Introduce advanced sewing techniques.
	in designs.	different dishes.	,

National Curriculum Expectations- Apply their understanding of computing to program, monitor, and control their products.

At Huncote, all children experience computing to program, monitor and control their products through the TEACH computing scheme of work.

At this stage, we have not included computing in the DT curriculum with the hope of developing and enhancing practical hands-on skills.

To ensure that the proposed plan aligns with the National Curriculum for Design and Technology (D&T) in the UK, I will review the curriculum requirements and compare them with the units provided. The National Curriculum for D&T at primary level generally includes:

1. Design

- o Use research and develop design criteria.
- o Generate, develop, model, and communicate ideas.

2. Make

- o Select and use a range of tools and equipment.
- o Select and use a wide range of materials and components.

3. Evaluate

- o Investigate and analyze existing products.
- o Evaluate their ideas and products against their own design criteria.
- $_{\circ}$ Understand the development of key events and individuals in D&T.

4. Technical Knowledge

- o Apply their understanding of how to strengthen, stiffen, and reinforce more complex structures.
- o Understand and use mechanical systems in their products.
- o Understand and use electrical systems in their products.
- o Apply their understanding of computing to program, monitor, and control their products.

5. Cooking and Nutrition

- o Understand and apply the principles of a healthy and varied diet.
- o Prepare and cook a variety of predominantly savory dishes.
- o Understand the source, seasonality, and characteristics of a broad range of ingredients.