



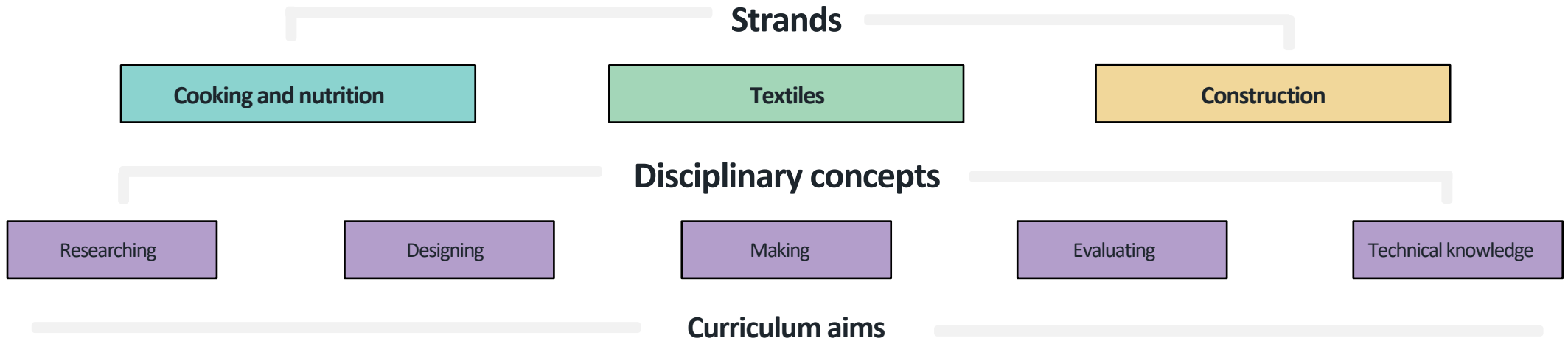
Thorngumbald DT Long Term Plan

	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
<u>EYFS</u>	<u>Skills and knowledge suggestions but not limited to:</u> Children will use primary colours to print. Children will know how to mix primary colours to make secondary colours. Children will know how to use glue to join. Children will know how to use tape to join. Children will be able to use a thin paint brush. Children will know how to draw a person- head, body, arms, legs and facial features	<u>Skills and knowledge suggestions but not limited to:</u> Children will know which glue or tape they need to use for their chosen purpose. Children will know how to make colours darker/lighter. Children will know how to use and mix water colour paints.	<u>Skills and knowledge suggestions but not limited to:</u> Children will know how to do observational drawings. Children will know how to use a split pin to join. Children will know how to use oil pastels. Children will know how to use papier mache. Children will know various methods of joining.
<u>Year 1</u>	<u>Construction - Toy makers' workshop</u> How can we make a toy from recycled materials that is fun and safe to play with?	<u>Textiles -Seaside adventures</u> What shapes and colours will bring my seaside collage to life	<u>Cooking and Nutrition - Plant power Snack like Jack</u> What tasty plant snacks help us grow strong like Jack?
<u>Year 2</u>	<u>Textiles -Buzzing bookmarks</u> How can you make a bookmark that's both fun and useful?	<u>Construction -Rebuilding history</u> How can we build strong and stable houses like those from the time of the Great Fire of London?	<u>Cooking and Nutrition - Super veggies to the rescue</u> How can we make veggies fun and delicious?
<u>Year 3</u>	<u>Textiles -Stone Age mysteries</u> How can you make the perfect pouch for a Stone Age adventure?	<u>Construction - Magnetic mysteries</u> How can we use magnets to make a model move mysteriously?	<u>Cooking and Nutrition- Roots and shoot</u> What summer dishes can we make with root vegetables?
<u>Year 4</u>	<u>Cooking and Nutrition - Chocolate that cares</u> How can we make a chocolate treat that is fair for people and kind to the planet?	<u>Construction -Roman innovations</u> <u>Bright Ideas:</u> How can we use electricity to make a working model?	<u>Textiles -Bag a story</u> How can we create a functional and creative book bag.
<u>Year 5</u>	<u>Textiles -Moonlit magic</u> How can fabric and stitching create atmosphere?	<u>Cooking and Nutrition -Central America on a plate</u> How can we cook a dish that celebrates its cultural flavours	<u>Construction -Fairy-tale engineering</u> How can we use pulleys and levers to solve a problem?
<u>Year 6</u>	<u>Construction - Electrifying creations</u> How can we combine electricity and design to create a spooky, Gothic-themed model?	<u>Textiles -Trash to treasure</u> How can you transform old materials into something new and amazing?	<u>Cooking and Nutrition - Mix it up</u> How can we mix recipes to invent an exciting new food?

While the curriculum map outlines our intended Design and Technology journey across the year, the order of projects may be adapted to reflect children's interests, current themes, and the individual needs of each cohort. This flexible approach ensures learning remains engaging, meaningful, and responsive, while still providing full coverage of the key knowledge, skills, and curriculum drivers within Design and Technology.



DT skills progression



1. Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
2. Build and apply a repertoire of knowledge, understanding and skills to design and make high-quality prototypes and products for a wide range of users.
3. Critique, evaluate and test their ideas and products and the work of others.
4. Understand and apply the principles of nutrition and learn how to cook.

Skills progression

EYFS

Aligned with the Early Learning Goals from the EYFS Statutory Framework (2024)

- **Researching:** (ELGs: Past and Present; The Natural World)
I can talk about the lives of the people around me and explore what they do and use in their jobs (e.g. bakers, builders, designers)
- **Designing:** (ELG: Creating with Materials)
I can choose and talk about what I want to make and what tools and materials I might use.
- **Making:** (ELGs: Fine Motor Skills; Creating with Materials)
I can safely use tools like scissors, glue and construction toys to make something I imagined or planned.
- **Evaluating:** (ELGs: Creating with Materials; Being Imaginative and Expressive)



I can talk about what I've made, explain how I did it and say how I might change or improve it.

- **Technical knowledge:** (ELGs: Creating with Materials; The Natural World)

I can explore how to use materials and tools in different ways, noticing how they feel and what they can do when I join, layer or build with them.

In the Early Years Foundation Stage (EYFS), Design and Technology is taught through the *Expressive Arts and Design* and *Physical Development* areas of learning, alongside opportunities for investigation and problem-solving within continuous provision. Children learn through hands-on exploration, imaginative play, and practical experiences that encourage creativity, curiosity, and independence.

DT in EYFS provides children with opportunities to:

- Explore and investigate a wide range of materials, tools, and techniques.
- Design, build, adapt, and evaluate models and creations through child-led and adult-guided activities.
- Develop fine motor skills through cutting, joining, threading, painting, moulding, and constructing.
 - Ask questions, solve problems, and test ideas through trial and error.
- Talk about what they are making, how it works, and how they could improve it.
- Use construction kits, loose parts, recycled materials, textiles, and malleable materials to create purposeful products.
- Explore simple mechanisms such as wheels, axles, hinges, sliders, and split pins through play and investigation.
- Develop early cooking and nutrition skills through preparing simple foods and learning about healthy choices.

Our EYFS environment encourages children to become:

- **Curious Explorers** by investigating how things work and experimenting with materials.
- **Personal Adventurers** by independently selecting resources and expressing their own ideas creatively.
 - **Dream Catchers** by imagining, designing, and creating solutions through imaginative play.
- **Culture Detectives** by exploring crafts, foods, homes, stories, and designs from different cultures and communities.

Through carefully planned provision and high-quality interactions, children build the foundations for future learning in Design and Technology while developing resilience, creativity, communication, and critical thinking skills.



DT skills progression



Y1

Cooking and nutrition

Plant power: Snack like Jack
What tasty plant snacks help us
grow strong like Jack?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore different fruits and vegetables and talk about which ones are healthy snacks.	I can plan a simple snack using fruits or vegetables, choosing shapes and colours I like.	I can prepare a fruit or vegetable snack safely, cutting and arranging pieces to make it appealing.	I can taste my snack and say what I like about it and how I could make it even better.	I can explain how to prepare food safely by washing hands, using clean tools and cutting carefully.
Introduces simple, healthy food preparation with familiar fruits and vegetables. Children learn the basics of hygiene, safe cutting, and begin to understand where food comes from.				

Y1

Textiles

Seaside adventures
What shapes and colours will
bring my seaside collage to life?



Researching	Designing	Making	Evaluating	Technical knowledge
I can look at seaside pictures and fabrics, and talk about the shapes, patterns and colours I notice.	I can choose colours and shapes to plan my seaside collage.	I can arrange and join fabric shapes securely to create my seaside collage.	I can compare my work with seaside pictures and say how well I showed my ideas.	I can explore how different fabrics feel and behave, and cut shapes safely and carefully.
Introduces children to fabric through simple collage. They learn to cut and arrange fabric shapes, begin to use joining techniques, and talk about colour, pattern and texture.				

Y1

Construction

Toy makers' workshop
How can we make a toy from
recycled materials that is fun
and safe to play with?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore toys and talk about what makes them fun and safe.	I can draw a simple plan for my toy and choose materials to use.	I can build my toy using my plan, choosing materials and adding moving parts.	I can test my toy to see how well it works and how to make it better another time.	I can practise cutting and joining materials safely.
Introduces basic construction using everyday materials; explores stability using joining methods and simple mechanisms such as wheels and axles.				





DT skills progression



Y2

Cooking and nutrition

Super veggies to the rescue
How can we make veggies
fun and delicious?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore different types of potatoes and explain how they can be cooked in different ways.	I can plan potato wedges by choosing which flavours or seasonings to add.	I can peel and cut vegetables safely; I can follow a recipe step by step to prepare and cook potato wedges safely.	I can taste my potato wedges, say what worked well, and suggest one way to improve them.	I can follow a recipe safely, using tools correctly and explaining how to cook potatoes in a healthy way.
Builds on basic preparation by introducing baking and seasoning. Children follow a simple recipe and learn that different cooking methods affect healthiness and taste.				

Y2

Textiles

Buzzing bookmarks
How can you make a
bookmark that's both fun
and useful?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore different fabric products and learn how to thread a needle.	I can create a design plan for a bug-themed bookmark that is both functional and appealing.	I can sew two pieces of fabric together and add decorative stitching to create a functional bookmark.	I can test and evaluate my bookmark for durability, usability and appearance.	I can practise running stitch and cross stitch to strengthen and decorate fabric
Builds on basic joining by introducing simple stitches such as running stitch and cross stitch. Children learn that textiles can be both decorative and functional as they make bookmarks.				

Y2

Construction

Rebuilding history
How can we build strong and
stable houses like those from
the time of the Great Fire
of London?



Researching	Designing	Making	Evaluating	Technical knowledge
I can find out about historical houses and say how they could be improved.	I can draw a plan for a Tudor model house with a simple moving part.	I can build a model of a Tudor house using card and sticks with a simple mechanism.	I can test if my model is stable and say how to improve it.	I can measure and learn about cross bracing to strengthen and how hinges, levers, pivots and sliders work.
Builds on modelling skills by designing historically inspired structures with improved strength and accuracy, incorporating a simple mechanism (hinge, lever with pivot, slider)				





DT skills progression



Y3

Cooking and nutrition

Roots and shoot
What summer dishes can we make with root vegetables?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore root vegetables and explain how they are used in seasonal dishes.	I can plan a summer roll recipe, choosing fillings that are colourful, healthy and tasty.	I can safely peel, slice and grate a range of vegetables and follow a simple recipe with support.	I can taste my summer roll, say how well my fillings worked together and suggest one improvement.	I can prepare vegetables safely, using peeling and cutting skills with greater control.
Extends food preparation skills to peeling, slicing and grating while exploring seasonality. Children begin to link balanced diets with varied ingredients and follow recipes with support.				

Y3

Textiles

Stone Age mysteries
How can you make the perfect pouch for a Stone Age adventure?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore and compare different pouches, discussing their features and sorting them into groups.	I can design a pouch using a paper template and plan features such as size, shape and fastening.	I can sew fabric pieces together, add a fastening and make sure my pouch is strong and functional.	I can test and evaluate my finished pouch, thinking about what worked well and what I could improve.	I can practise stitches and fastenings for my pouch.
Extends sewing skills to joining fabric securely with seam stitches and adding fastenings. Children design and make a pouch, linking historical context to functional design.				

Y3

Construction

Magnetic mysteries
How can we use magnets to make a model move mysteriously?



Researching	Designing	Making	Evaluating	Technical knowledge
I can investigate how magnets work and identify everyday uses of magnetic forces in toys and tools.	I can create a design criteria and plan an ancient Egyptian-themed model that uses magnets to create a surprising effect.	I can join materials to make a strong, functional ancient Egyptian-themed model with a magnetic effect.	I can evaluate against my design criteria and explain how well my magnetic model performs and suggest improvements.	I can accurately measure and join, reinforce, stiffen and strengthen by using folds, slots, tabs, ties, flanges and L braces.
Introduces movement through magnetic forces to make a surprising effect on a mysterious ancient Egyptian-themed model or toy. Incorporates more advanced joining methods such as folds, slots, tabs, L braces and flanges.				





DT skills progression



Y4

Cooking and nutrition

Chocolate that cares
How can we make a chocolate treat that is fair for people and kind to the planet?



Researching	Designing	Making	Evaluating	Technical knowledge
I can identify flavour combinations and textures that make chocolate delicious.	I can design a sustainable chocolate product that cares for the planet.	I can create a chocolate treat using Fairtrade ingredients and eco-friendly practices. I can use basic food preparation techniques confidently and hygienically.	I can evaluate my chocolate creation and explain how it reflects Fairtrade and sustainability values.	I can describe how ingredients are sourced and processed. I can explain what Fairtrade is and why it is important for cocoa farmers.
Introduces Fairtrade and sustainability, linking food choices to ethical and environmental impact. Children learn about food sources beyond the UK and create chocolate products with purpose.				

Y4

Textiles

Bag a story
How can we create a functional and creative book bag



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore different bags and learn about a textile designer, explaining how their ideas inspire strong, useful and appealing designs.	I can design a book bag with chosen size, handles and decorations linked to a favourite story.	I can sew fabric pieces together neatly and securely to create my book bag.	I can test my bag for strength and use, and explain how well it meets my design goals, suggesting improvements.	I can explain the purpose of different stitches and how I used tools safely.
Develops construction skills through making a sturdy fabric tote bag. Children practise backstitch and handle attachment and explore how designers influence choices in functionality and style.				

Y4

Construction

Roman innovations
Bright Ideas: How can we use electricity to make a working model?



Researching	Designing	Making	Evaluating	Technical knowledge
I can investigate Roman inventions and engineering and explore how simple circuits are used.	I can design a functional Roman-themed model with a clear purpose and electrical element.	I can build a Roman-themed model and integrate a simple working electrical circuit and mechanism.	I can test the model's function and circuit reliability and suggest ways to improve.	I develop my knowledge of mechanisms – cams.
Builds on interactive elements by building a functional Roman-themed model, integrating electrical circuits and mechanisms such as cams.				





DT skills progression



Y5

Cooking and nutrition

Central America on a plate
How can we cook a dish that celebrates its cultural flavours?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore ingredients and flavours from Central American cuisine and explain how they are used together.	I can plan how to adapt a traditional recipe for flavour, texture or presentation.	I can follow a multi-step recipe to prepare tortillas and dips with control and accuracy.	I can evaluate the taste, appearance and authenticity of my dish and suggest improvements.	I can describe how cultural and seasonal ingredients influence food choices.
Develops independence by preparing and cooking a multi-step dish (tortillas, salsa, guacamole). Children deepen their understanding of cultural influences on food and learn to adapt recipes.				

Y5

Textiles

Moonlit magic
How can fabric and stitching create atmosphere?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore the work of different textile artists and talk about how fabric, colour and stitching create mood and atmosphere.	I can design my wall hanging and use a template to cut fabric shapes accurately.	I can sew on my appliqué shapes and use blanket stitch to finish edges.	I can evaluate my wall hanging, explain how it creates atmosphere and suggest improvements.	I can use running stitch and overstretch to attach appliqué shapes securely and neatly.
Explores textiles as a medium for storytelling and atmosphere. Children combine appliqué, layered fabrics and decorative stitching to design and make a wall hanging with expressive impact.				

Y5

Construction

Fairy-tale engineering
How can we use pulleys and levers to solve a problem?



Researching	Designing	Making	Evaluating	Technical knowledge
I can investigate how mechanisms can solve real-life problems and link this to a problem in the world of fairy tale.	I can create a design criteria and draw a labelled plan to solve a problem using mechanisms.	I can construct a fairy tale-themed picture book or theatre backdrop that includes working mechanisms.	I can evaluate my product against my criteria and suggest improvements.	I can learn how pulleys, levers and linkages work.
Expands functional design through the construction of a fairy tale-themed theatre backdrop or storybook incorporating mechanical systems like pulleys, levers and linkages along with previously taught mechanisms.				





DT skills progression



Y6

Cooking and nutrition

Mix it up
How can we mix
recipes to invent an
exciting new food?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explain what makes a hybrid food exciting and compare chef creations, describing how flavour, texture and presentation contribute to their success.	I can design a hybrid dish that combines two techniques, planning ingredients, shape and decoration.	I can follow my recipe independently, making adjustments where needed to improve the outcome.	I can evaluate my dish for taste, appearance and cultural inspiration, suggesting improvements with clear reasons.	I can explain why some flavour combinations work and apply preparation techniques carefully to improve flavour, texture and presentation.
Encourages creativity and independence by designing and cooking hybrid dishes. Children critically evaluate flavour, texture and presentation, applying advanced preparation and cooking techniques.				

optional unit

Textiles

Trash to treasure
How can you transform old
materials into something
new and amazing?



Researching	Designing	Making	Evaluating	Technical knowledge
I can explore upcycled textile products and explain how they reduce waste.	I can plan a creative project that reuses materials with purpose.	I can sew my cushion cover with accuracy, following the plan I designed, and ensure all pieces fit together well.	I can reflect on my upcycled cushion cover, thinking about design, function and sustainability, and suggest ways to improve future projects.	I can use a range of stitches and embellishments to add strength and detail.
Encourages sustainability and innovation by upcycling old materials into new textile products. Children apply a range of stitching and embellishment techniques with independence and reflect on design for function, creativity and environmental responsibility.				

Y6

Construction

Electrifying creations
How can we combine
electricity and design to
create a spooky,
Gothic-themed model?



Researching	Designing	Making	Evaluating	Technical knowledge
I can describe features of Gothic design using key vocabulary.	I can create a labelled design showing Gothic design and electrical features.	I can assemble a stable structure and add electrical features.	I can test the electrical circuits and evaluate the model, explaining how it could be improved further.	I can explain how electrical circuits work
Consolidates previous learning on mechanical and electrical systems by the construction of a strong, reinforced and aesthetically pleasing structure.				

