

Design Technology Long-Term Plan 2024-25

Equipping Children for a World of Possibilities

(Design Technology) INTENT

Curriculum Intent: Equipping Children for a World of Possibilities.

Design Technology Subject Intent:

Design Technology at our school is about providing children with a wide range of first-hand experiences to inspire and empower their creativity. Children will learn to manage their own risks in a safe environment with time to reflect. They will acquire a mastery of core basic skills which will help prepare them for adult life; from using tools safely to preparing basic healthy foods with understanding about where food comes from. All essential skills in a rapidly changing world.

(Design Technology) IMPLEMENT

How is your subject taught?

Design Technology is taught in year groups. There is a construction, cookery and textiles focussed projects throughout the year focussing on the progression of skills for each particular year group. There is a clear sequence of planning- Plan, make, evaluate, the children are taught by the class teacher in their own class. This is taught every term in blocked sessions which is interwoven within the curriculum topic. This sequence of lessons is then entered into children's learning challenge books.

Children are taught DT through whole class inputs and then skills, knowledge and ideas are developed either in groups or whole class teaching sessions where it is relevant. In all year groups, particularly in Reception, opportunities are provided through continuous provision for children to access DT activities. As a school we wanted children to be given a problem to find a solution to apply skills in DT. For example if children have been learning about habitats that they apply that knowledge to create a suitable habitat for an animal of their choice or a to create a time travel machine with a hinge to apply their learning about hinges.

We try to raise the profile of DT within school by offering clubs that allow children to construct and be creative. Also every year, during the Summer term, as a school we hold an enterprise project where each year group designs and creates something to sell at the Summer fayre to raise money for their class. They are given an initial budget and have to work within that to try to gain profit. The make prototypes and market the product for sale. the children then hold the stalls to sell the items. This has a DT focus whilst teaching the children life skills such as business and budgeting skills. In all years groups, there is adult support for our SEND children and risk assessments are carried out to make adults and children to aware of the risks so these can be managed safely.

(Design Technology) Long-term Plan

RECEPTION

The most relevant statements for DT are taken from the following areas of learning:

- Physical Development
- Expressive Arts and Design

Development matters 2020 and Early learning goals (early adopters) Three and Four-Year-Olds statements

Personal, Social and Emotional Development

Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them.

Physical Development

- Use large-muscle movements to wave flags and streamers, paint and make marks.
- Choose the right resources to carry out their own plan.

Use one-handed tools and equipment, for example, making snips in paper with scissors.

Understanding the World

Explore how things work.

Expressive Arts and Design

- Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.
- Explore different materials freely, in order to develop their ideas about how to use them and what to make.
- Develop their own ideas and then decide which materials to use to express them.

Create closed shapes with continuous lines, and begin to use these shapes to represent objects.

Reception Statements Physical Development

- Progress towards a more fluent style of moving, with developing control and grace.
- Develop their small motor skills so that they can use a range of

tools competently, safely and confidently.

• Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.

Expressive Arts and Design

- Explore, use and refine a variety of artistic effects to express their ideas and feelings.
- Return to and build on their previous learning, refining ideas and developing their ability to represent them.

Create collaboratively, sharing ideas, resources and skills.

DT ELG Statements

Physical Development- Fine Motor Skills

Use a range of small tools, including scissors, paintbrushes and cutlery.

Expressive Arts and Design Creating with Materials

• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.

(Design Technology) Long-term Plan

Reception	Autumn	Spring	Summer
	Textiles	Cookery	Construction
	Angle making Where this fits with the EYFS curriculum (Development Matters 2020 and Early Learning Goals ELG Early adopters): Expressive Arts and Design Development Matters Three and Four Year Old statements	Food- Easter nest cakes Development matters 2020 and Early learning goals (early adopters) Three and Four-Year-Olds statements Choose the right resources to carry out their own plan. Use one-handed tools and equipment, for example, making snips in paper with scissors.	Designing/making a superhero cape and mask (structures) Development matters 2020 and Early learning goals (early adopters) Three and Four-Year-Olds statements Personal, Social and Emotional Development Select and use activities and resources, with help when needed. This helps them to achieve

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Reception Statements

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DT ELG Statements

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Key stage 1

DT NATIONAL CURRICULUM KSI

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.

Classroom Monitor statements

Year One	Year Two
Through exploring and assembly they can find ways to make their structures	
more stable so they are free standing. E.g The use of a base, overlapping joints. (Make)	
They can roll, fold, tear and cut paper and card.(make)	
They can tell someone about their design ideas. (Design)	They can make a mock up of their design and discuss it (design)
They can create a drawing of their idea and templates for their design. (Design)	They can use ICT to explore their design ideas. E.g Use the internet to research design ideas or use a basic paint program to draw their design. (Design)
They can cut along straight lines, curved lines and shapes marked out by a template. (Make)	They can read a simple scale to measure and weigh out ingredients. (food)
They can use the right tools to peel, grate and chop (food)	

They can use tape and glue to create temporary joins, fixed joins and moving joins.(Make)	They can join fabrics using staples and a running stitch. (make)
Joins.(wake)	Thou can use simple mechanisms in their products a glinges, lovers, wheels etc.
	They can use simple mechanisms in their products e.g hinges, levers, wheels etc.
They decorate textiles using buttons and beads, sequins, braids, ribbons.	They can colour fabrics using paints to print and paint. (make)
(make)	
They can independently cut wood/ dowelling using a hacksaw and bench	
hook.(make)	
They can say what they like and don't like about existing products (evaluate)	They can say how well their design and product met the given design criteria. (design)
	They can use a simple circuit in a model. E.g A closed circuit with a bulb. (make)
	They can name food from each section of the Eat Well plate and understands that they
	should eat at least 5 portions of fruit and veg a day. (Food)
	They understand that food comes from plants and animals and has to be farmed, grown or
	caught. (food)

Year 1			
	Autumn	Spring	Summer
	Food	Construction	Construction
	Design your own superhero smoothie	Building your own castle with moving parts to protect you from the enemy.	Make a bug hotel using wood to protect Oliver's Vegetables/Percy the Park Keeper's
	Assessment		grass
	They can create a drawing of their idea and	Assessment	Sawing wood for bug hotels
	templates for their design. (Design)	They can use tape and glue to create	
		temporary joins, fixed joins and moving joins.	Assessment
	They can tell someone about their design	(Make)	They can independently cut wood/ dowelling
	ideas. (Design)	They can create a drawing of their idea and templates for their design. (Design)	using a hacksaw and bench hook. (make)
	They can name food from each section of the		They can create a drawing of their idea and
	Eat Well plate and understands that they	They can tell someone about their design	templates for their design. (Design)
	should eat at least 5 portions of fruit and veg	ideas. (Design)	
	a day. (Food)		They can tell someone about their design
		Through exploring and assembly they can find	ideas. (Design)
		ways to make their structures more stable so	
			Cookery

They understand that food comes from plants and animals and has to be farmed,	they are free standing. E.g The use of a base, overlapping joints. (Make)	Making a savoury salad.
grown or caught. (food)		Assessment
	Textiles	Ingredients for a salad- taste test – healthy
They can say how well their design and product met the given design criteria.	Design a scarf for Paddington adventures around the UK.	fruits ingredients and then plan, make, evaluate
(design)		
	Assessment	They can say what they like and don't like
	They can create a drawing of their idea and	about existing products (evaluate)
Construction	templates for their design. (Design)	
Christmas pop up movement cards		They can use the right tools to peel, grate and
	They can tell someone about their design	chop (food)
Assessment	ideas. (Design)	
They can make a mock-up of their design ar	d	They can tell someone about their design
discuss it (design)	They decorate textiles using buttons and	ideas. (Design)
	beads, sequins, braids, ribbons. (make)	
They can use simple mechanisms in their		
products e.g. pull or push mechanisms using	They can cut along straight lines, curved lines	
card.	and shapes marked out by a template.	
	(Make)	
They can say how well their design and		
product met the given design criteria.	They can roll, fold, tear and cut paper and	
(design).	card. (make)	

Year 2			
	Construction	Construction	Textiles
	Hinge time travel device- Create a time travel	Fire engine suitable for the GFOL-	Sewing- joining 2 fabrics together
	device with a hinge.	Using wheels and axels	Runner stitch
	Assessment	Assessment	They can join fabrics using staples and a
		They can make a mock-up of their design and	running stitch. (make)
		discuss it (design)	

They can make a mock-up of their design and discuss it (design)

They can use simple mechanisms in their products e.g hinges, levers, wheels etc.

They can say how well their design and product met the given design criteria. (design).

Construction

Christmas tree decoration (Cookie slices) Forest school.

They can use tape and glue to create temporary joins, fixed joins and moving joins. (Make)

They can create a drawing of their idea and templates for their design. (Design)

They can tell someone about their design ideas. (Design)

Be able to thread ribbon through the hold they have drilled. (make)

Uses a saw and hand drill independently and safely. (Make)

They can use simple mechanisms in their products e.g hinges, levers, wheels etc.

They can say how well their design and product met the given design criteria. (design)

Cookery

Making bread- design a new sandwich to make using the bread made.

They can use ICT to explore their design ideas. E.g. Use the internet to research design ideas or use. a basic paint program to draw their design. (Design)

They can read a simple scale to measure and weigh out ingredients. (food)

They can say how well their design and product met the given design criteria. (design)

They can make a mock-up of their design and discuss it (design)

They can use ICT to explore their design ideas. E.g Use the internet to research design ideas or use a basic paint program to draw their design. (Design)

They can colour fabrics using paints to print and paint. (make)

They can say how well their design and product met the given design criteria. (design)