St.Joseph's R.C. Primary School

'Through love and service, with Jesus in our hearts and heads, we can achieve anything.



Foundation Stage

Great et America

In the EYFS Design and Technology is taught through the Expressive Arts and Design: Creating with Materials Strand. Pupils should safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. They should share their creations, explaining the process they have used. They should understand the importance of healthy food choices. They should be introduced to and begin to use some of the key vocabulary and develop their understanding of design and technology. Our EYFS Curriculum documentation outlines the Expressive Arts and Design content more specifically to the theme.

Key Stage One

Pupils should be taught to design purposeful, functional, appealing products for themselves and other users based on design criteria. They should generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. They should select from and use a range of tools and equipment to perform practical tasks. They should select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. They should explore and evaluate a range of existing products. They should evaluate their ideas and products against design criteria. They should build structures, exploring how they can be made stronger, stiffer and more stable. They should explore and use mechanisms. They should use the basic principles of a healthy and varied diet to prepare dishes. They should understand where food comes from

Key Stage Two

Pupils should be taught to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. They should generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. They should select from and use a wider range of tools and equipment to perform practical tasks accurately. They should select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. They should investigate and analyse a range of existing products. They should evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. They should understand how key events and individuals in design and technology have helped shape the world. They should apply their understanding of how to strengthen, stiffen and reinforce more complex structures. They should understand and use mechanical systems in their products. They should understand and use electrical systems in their products. They should apply their understanding of computing to program, monitor and control their products. They should understand and apply the principles of a healthy and varied diet. They should prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. They should understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

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		Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn								
Term	Topic	What makes me special? Bringing nursery rhymes to life!	Toys - how have toys changed over time?	To Infinity and Beyond - how has space travel changed in living memory?	Let's Rock! - how did people live in the Stone, Bronze and Iron Ages?	Meet the Greeks - why should we thank the Ancient Greeks?	That's Settled - who were the Anglo- Saxons?	Vicious Vikings - why did the Vikings invade Britain and how successful were they?
	DT Skills and Concepts Progression	In this unit, the children will: Create collaboratively, sharing ideas, resources and skills.	In this unit, the children will: -use pictures and words to plan, begin to use models -design a product for myself following design criteria -research similar existing products explain what I'm making and why -select tools/equipment to cut, shape, join, finish and explain choices -measure, mark out, cut and shape, with support try to use finishing techniques to make product look good -talk about existing	In this unit, the children will: -explain purpose of product, how it will work and how it will be suitable for the user describe design using pictures, words, models, diagrams, begin to use ICT -choose best tools and materials, and explain choices -join materials/components together in different ways -measure, mark out, cut and shape materials and components, with supportchoose suitable materials and explain	In this unit, the children will:	In this unit, the children will: -explain how to be safe/hygienic -think about presenting product in interesting/ attractive ways -understand ingredients can be fresh, precooked or processed -begin to understand about food being grown, reared or caught in the UK or wider world -describe eat well plate and how a healthy diet=variety / balance of food and drinks -explain importance of food and drink for active, healthy bodies -prepare and cook some dishes safely and	In this unit, the children will: DT	In this unit, the children will: -use research of user's individual needs, wants, requirements for design criteria and specification -independently model and refine design ideas by making prototypes and using pattern pieces -produce suitable lists of tools, equipment, materials needed, considering constraints -select appropriate materials, fit for purpose; explain choices, considering functionality and

			products, and say what is and isn't good -talk about my work, linking it to what I was asked to do -begin to use levers or slides	choices -use finishing techniques to make product look good -talk about what I would do differently if I were to do it again and why -describe what went well, thinking about design criteria -measure materials -describe some different characteristics of materials -join materials in different ways -use joining, rolling or folding to make it stronger -use own ideas to try to make product stronger		hygienically -use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking		aesthetics -create, follow, and adapt detailed step-bystep plans -accurately measure, mark out, cut and shape materials/components -accurately assemble, join and combine materials/components -accurately apply a range of finishing techniques -be resourceful with practical problems -evaluate quality of design while designing and making; is it fit for purpose? -select materials carefully, considering intended use of the product, the aesthetics and functionalityexplain how product meets design criteria -reinforce and strengthen a 3D frame -think about user's wants/needs -make product attractive and strong -use a range of joining techniques
	Topic	What are our seasons and	A Trip Around Town - how has our	Adventure is out there! - how has	Healthy Me - how does my body	Lighting it up!	Mapping it out!	Gadgets Galore - how did electricity
		celebrations?	town of Heywood changed over time?	transport changed over	work?			change the world?
Spring	DT Skills and Concepts Progression	In this unit, the children will: Return to and build on their previous learning, refining ideas and developing their ability to represent them.	In this unit, the children will:	In this unit, the children will: -design products for myself and others following design criteria -make suggestions as to what I need to do nextdescribe which tools I'm using and why -work safely -evaluate how good existing products are -describe design using pictures, words, models, diagrams, begin to use ICT -join materials/components together in different ways -measure, mark out, cut and shape materials and components, with supportdescribe which tools I'm using and why -choose suitable materials and explain choices depending on characteristicsuse finishing techniques to make product look good	In this unit, the children will: -carefully select ingredients -use equipment safely -make product look attractive -think about how to grow plants to use in cooking -begin to understand food comes from UK and wider world -describe how healthy diet = variety/balance of food/drinks -explain how food and drink are needed for active/healthy bodiesprepare and cook some dishes safely and hygienically -grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	In this unit, the children will: -refer to design criteria while designing and making -use criteria to evaluate product -discuss by whom, when and where products were designed -research whether products can be recycled or reused -know about some inventors/designers/ engineers/chefs/manufacturers of ground breaking products -select most appropriate tools / techniques -explain alterations to product after checking it -grow in confidence about trying new/different ideasuse number of components in circuit	In this unit, the children will:	In this unit, the children will: -use selected tools and equipment precisely -explain how product will appeal to audience; make changes to improve quality -use techniques that involve a number of steps -keep checking design is best it can beevaluate ideas and finished product against specification, stating if it's fit for purpose -test and evaluate final product; explain what would improve it and the effect different resources may have had -consider the impact of products beyond their intended purpose -be confident to try new/different ideas -use cams, pulleys and gears to create movement -use different types of circuit in product
Spring Term	Topic	What could be in this egg?	Houses and Homes - how is my home different to my grandparents when they were children?	Fire, Fire! How did the Great Fire of London change our capital forever?	Ancient Civilisations - where did the first civilisations appear?	Rotten Romans? - why were the Romans so successful and were they all rotten?	Marvellous Mayans - why do we remember the Maya?	World War II and the Home front - what was life like during WWII?
	DT Skills and Concepts	In this unit, the children will: Explore, use and refine a	In this unit, the children will:	In this unit, the children will:	In this unit, the children will: -begin to research	In this unit, the children will: -explain how to be safe/hygienic	In this unit, the children will: -take a user's view into	In this unit, the children will:
	Progression	variety of artistic effects to	-explain what my product is for, and how	build structures, exploring how they can be made	others' needs	-think about presenting	account when designing	

	express their ideas and feelings	it will work -explain what I want to do -have my own ideas -consider what I need to do next -select tools/equipment to cut, shape, join, finish and explain choices -measure, mark out, cut and shape, with support -choose suitable materials and explain choices -talk about my work, linking it to what I was asked to do -talk about existing products considering: use, materials, how they work, audience, where they might be used -talk about things that other people have made -begin to talk about what could make a product better -describe differences in materials -suggest ways to make material/product stronger	stronger, stiffer and more stable select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	-show design meets a range of requirements -describe purpose of product -follow a given design criterion -have at least one idea about how to create product -describe design using an accurately labelled sketch and words -make design decisions -make a prototype -begin to use computers to show design -consider how good product will be -begin to measure, mark out, cut and shape materials/components with some accuracy -begin to assemble, join and combine materials and components with some accuracy -begin to apply a range of finishing techniques with some accuracy -begin to evaluate existing products, considering; how well they have been made, materials, whether they work, how they have been made, fit for purpose -begin to understand by whom, when and where products were designed -begin to make strong structures	product in interesting/ attractive ways -understand ingredients can be fresh, precooked or processed -begin to understand about food being grown, reared or caught in the UK or wider world -describe eat well plate and how a healthy diet-variety / balance of food and drinks -explain importance of food and drink for active, healthy bodies -prepare and cook some dishes safely and hygienically -use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	-begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose c-create own design criteria -have a range of ideas -produce a logical, realistic plan and explain it to others. -use cross-sectional planning and annotated sketches -model and refine design ideas by making prototypes and using pattern pieces. -select appropriate materials, fit for purpose; explain choices, considering functionality -create and follow detailed step-by-step plan explain how product will appeal to an audience -mainly accurately measure, mark out, cut and shape materials/components -mainly accurately assemble, join and combine materials/components -use selected tools/equipment with good level of precision evaluate quality of design while designing and making -test and evaluate final product -begin to evaluate how much products cost to make and how	
Topic	Which is the smallest minibeast?	Comparison Study Go Wild! Christopher Columbus and Robert Falcon Scott - how have voyages of discovery changed over time?	Let it grow - how do living things grow and change over time?	Rainforests - what's so special about the rainforests?	Water Worlds - how did water travel change the world?	innovative they are Marvellous Mayans - why do we remember the Maya?	WWII - why was winning the Battle of Britain so important?
DT Skills and Concepts Progression	In this unit, the children will: 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;	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will: -use internet and questionnaires for research and design ideas -make design decisions considering time and resourcesclearly explain how parts of product will workproduce suitable lists of tools, equipment/materials needed -mainly accurately apply a range of finishing techniques -use techniques that involve a small number of steps -begin to be resourceful with practical problems	In this unit, the children will:

Summer	Торіс	Is everyone good in	Food glorious food	At the seaside -	Ancient Egypt -	Angry Earth - what	-evaluate ideas and finished product against specification, considering purpose and appearanceevaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose	Crime and
Term	Торге	the land of fairy tales?	- healthy diet, healthy mind, means healthy me.	how have British holidays changed over time?	how much did the Ancient Egyptians achieve?	links mountains, volcanoes and earthquakes?	Monarchy - how did the ruling Monarchs influence change in Britain?	Punishment - how has this aspect of social history changed over time?
	DT Skills and Concepts Progression	In this unit, the children will: 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;	In this unit, the children will: -describe textures wash hands & clean surfaces -think of interesting ways to decorate food -say where some foods come from, (i.e. plant or animal) -describe differences between some food groups (i.e. sweet, Vegetables etc.) -discuss how fruit and vegetables are healthy -cut, peel and grate safely, with support -work in a safe and hygienic manner	In this unit, the children will:	In this unit, the children will:	In this unit, the children will: -use research for design ideas -show design meets a range of requirements and is fit for purpose -begin to create own design criteria -have at least one idea about how to create product and suggest improvements for designproduce a plan and explain it to others -say how realistic a plan is -include an annotated sketch -make and explain design decisions considering availability of resources -explain how product will work -make a prototype -begin to use computers to show designevaluate existing products, considering: how well they've been made, fit for purpose -measure carefully to avoid mistakes -attempt to make product strong -continue working on product even if original didn't work -make a strong, stiff structure	In this unit, the children will:	In this unit, the children will:
	Topic	How can we keep ourselves healthy?	Meet the Victorians - what was life like for children in England during the Victorian period?	Forest Fun - why are plants important to us all?	A Country Study— North America (Canada)	Remarkable Railways - how did the railways transform Rochdale, Heywood and beyond?	Changing Britain - how has life changed in Modern Britain?	Moving on - when and why do we experience transition in our lives?
	DT Skills and Concepts Progression	In this unit, the children will: 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	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:	In this unit, the children will:

		have used;			
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