DESIGN & TECHNOLOGY

Shining as we learn in Faith, Family and Friendship!

DESIGN & TECHNOLOGY CURRICULUM OVERVIEW

STATEMENT OF INTENT

At St William's we believe that design and technology should give our children the knowledge and skills to be the designers and innovators of the future, developing and enhancing God's world. Using an activity focused approach, children innovate design, make, and evaluate a variety of well-crafted products but not necessarily following a linear approach; tinkering, exploring and retrying are actively encouraged. Skills are taught progressively to ensure that children revisit and build upon previously learnt knowledge and skills. Evaluation is an integral part of the design process and allows children to adapt and improve their product. D&T is carefully woven through our whole school curriculum and links with other disciplines, particularly Maths, Science and Art. Cooking and nutrition feature annually as we believe that teaching pupils to cook is an important part of promoting health, wellbeing and wider life skills.

THE GOLDEN THREADS OF EYFS

The children make models using boxes and different media They experiment with scissors, hole punches, tape etc. in continuous provision They use ingredients to bake, make and experiment	They explore different construction toys to create their own structures They fix and join equipment to make real and imagined building, vehicles and structures They draw and label designs and/or created maps of buildings and structures

YEAR 1

KEY CONCEPT YEAR 1- We are makers!

AUTUMN TERM	SPRING TERM	SUMMER TERM
ASPECT – COOKING AND NUTRITION Fruit Hedgehogs – Design and make their own creature selecting their preferred fruit.	**ASPECT – TEXTILES** Hand Puppets – Design and make a puppet.	**ASPECT - STRUCTURES** Play-park equipment- Following a trip to the park, design and make play-park equipment.

YEAR 2

KEY CONCEPT YEAR 2 – We are designers!

AUTUMN TERM	SPRING TERM	SUMMER TERM
ASPECT - MECHANISMS (WHEELS & AXLES)	**ASPECT - MECHANISMS (SLIDERS)**	**ASPECT – COOKING AND NUTRITION**

Space Buggies – Design, make and evaluate space buggies using wheels and axles.	Great Fire of London Story Board – Make a storyboard of the story of the Great Fire of London with sliders.	Healthy Kebabs - Design, make and evaluate using healthy fruits and vegetables.

YEAR 3		
KEY CONCEPT YEAR 3 – We are product designers!		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
ASPECT – COOKING AND NUTRITION Chocolate Biscuits – Design, make and evaluate a chocolate biscuit and a wrapper as part of a wider topic on Charlie and the Chocolate Factory.	**ASPECT – TEXTILES** Create a textile-based Easter/Spring Card.	**ASPECT - MECHANISMS (LEVERS & LINKAGES)** Italy Information Board – Use leavers, sliders and linkages to add interactive elements to an information board.

YEAR 4		
KEY CONCEPT YEAR 4 – Design and technology has evolved throughout history		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
ASPECT – COOKING AND NUTRITION Peasant Bread – Experiment with bread making. Compare bread from Anglo-Saxons times with bread of today.	**ASPECT - ELECTRICAL SYSTEMS – CIRCUITS & SWITCHES and STRUCTURES** 3D models - Design, make and evaluate an illuminated sign.	**ASPECT – TEXTILES** Tudor Purses – Design and make a simple purse.

YEAR 5		
KEY CONCEPT YEAR 5- Make do and mend! How can we make the best of the resources we have?		
AUTUMN TERM	**SPRING TERM**	**SUMMER TERM**
ASPECT - TEXTILES Slippers – Design and create a pair of functional slippers.	**ASPECT - STRUCTURES** Birdboxes – Design, make and evaluate a bird hide using a variety of materials.	**ASPECT – COOKING AND NUTRITION** Food Rationing –Investigate rationing and create meals using basic rations and traditional methods

YEAR 6		
KEY CONCEPT YEAR 6 – We are the designers of the future!		
SPRING TERM		**SUMMER TERM**
ASPECT – COOKING AND NUTRITION Pasta – Research different types of pasta and make fresh ravioli.	**ASPECT - TEXTILES** Sustainable Fashion – Investigate sustainable fashion and how designers use recycled materials in their work. Design a bag from recycled materials.	**ASPECT - MECHANISMS & ELECTRICAL SYSTEMS** Construction & Control - Complete a Lego topic using coding in computing and design technology to make moveable mechanisms.