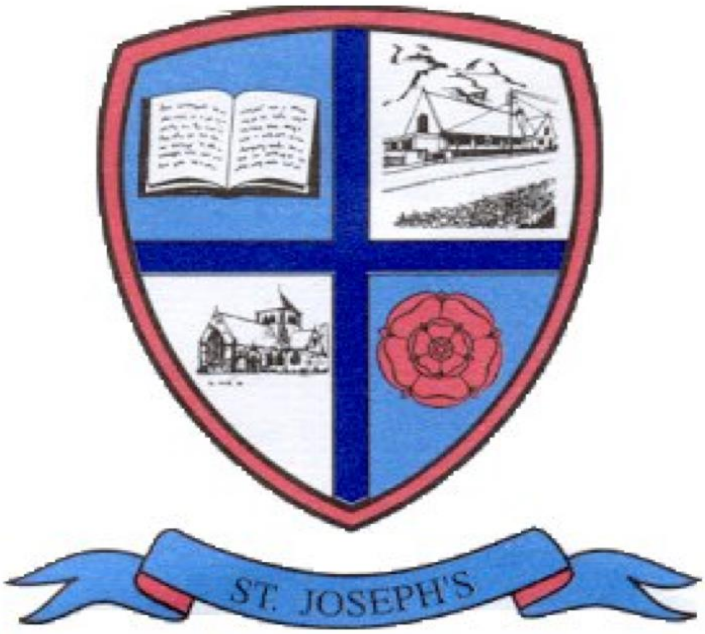
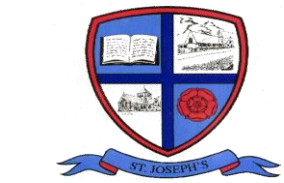
ST JOSEPH'S CATHOLIC PRIMARY SCHOOL



DESIGN AND TECHNOLOGY POLICY

Reviewed: October 2022

To be reviewed: October 2024



'Living life to the full'

Rationale

This policy reflects the mission statement and aims of our school in relation to the Design and Technology curriculum. It sets out a framework within which teaching and non-teaching staff can operate and gives guidance on planning, teaching and assessment.

Aims of the subject

Design and Technology prepares pupils to participate in tomorrow's rapidly changing technologies. They learn to think and intervene creatively to improve quality of life. The subject calls for pupils to become autonomous and creative problem solvers, as individuals and members of a team. They must look for needs, wants and opportunities and respond to them by developing a range of ideas and making products and systems. They combine practical skills with an understanding of aesthetics, social and environmental issues, function and industrial practices. As they do so, they reflect on and evaluate present and past technology, its uses and effects. Through Design and Technology, all pupils can become discriminating and informed users of products and become innovators.

Aims of Design and Technology in our school

The key aim of Design and Technology is to enable pupils to learn how to contribute towards and to intervene creatively and constructively to improve the modern world in a rapidly changing technological society.

The aims of Design and Technology in this school are:-

- To provide opportunities for children to experience designing, making and modifying, using a wide range of materials including card, textiles, construction materials and food
- To develop children's design and technology capability
- To develop specific technological understanding, including the application of ICT
- To foster the design and manufacturing skills needed to produce quality practical solutions to real life problems

The children will have opportunities to:-

- Use the design process whereby ideas may be transformed into products/ objects as they continually evaluate their work
- Disassemble, investigate and evaluate products
- Have enjoyable, practical learning experiences

Teaching and Learning

Time allocation

It is recommended that 30-36 hours per year are allocated to Design and Technology at both Key Stage 1 and Key Stage 2 in order to address the required programmes of study. Design Technology time may be blocked together rather than taught in weekly sessions if this would better benefit teaching, learning or the topic unit being taught. However, teachers must ensure that pupils have regular opportunities to practise their learned design technology skills, for example, through continuous provision/ class challenges or homework tasks.

Planning

Plan BEE planning is used throughout KS1 and KS2, in line with the new NC Programmes of Study for Design Technology, and runs on a 3 year teaching cycle (Appendix 1) to ensure full curriculum coverage and skill progression for our mixed age classes.

Class Organisation and Teaching Style

Within classes pupils are taught individually, in groups or as a whole class as appropriate. It is recognised that co-operation, effective learning and understanding are promoted through whole class and group work, but to ensure differentiation and to facilitate accurate assessments children may work individually.

Design Technology requires the provision of a range of materials and equipment to enable children to experience the full range of Design and Technology activities. Teachers should be mindful of health and safety issues when dealing with certain materials and tools in Design and Technology. In the interests of safety, it may be necessary for areas of the classroom to be shut off to pupils apart from those undertaking a particular process (for example, using a hacksaw) with the 1:1 supervision of an adult.

Assessment

Assessment is used to inform future planning and to provide information about individuals throughout their time at this school.

Assessment techniques will ensure that teachers assess the on-going design process and not just the finished products or outcomes. These techniques should include:-

- Teachers' observations of pupils
- Teacher – pupil discussion
- Teacher questioning
- Pupils' drawings, notes, models, comments and written work
- Pupils' on-going analysis of their achievements
- Photographs of children engaged in the design process

- Use of ICT as appropriate
- Evaluation of final product
- Evidence gathered in digital portfolios

When reviewing the children's progress in Design and Technology, teachers must consider pupils':-

- Knowledge and understanding of materials and components
- Understanding of mechanisms and ICT control
- Ability to use materials and equipment safely
- Ability to develop, plan and communicate design ideas
- Interest and motivation in designing and making
- Ability to appreciate and produce quality items that meet an intended purpose

Record Keeping and Reporting

Pupil's Design and Technology skills will be assessed individually by their class teacher. This data is then analysed by the subject leader and recorded on a whole school data sheet (Appendix 2) Progress will be reported to parents at the end of each academic year as part of the pupil's school report.

Subject Leader Role

The role of the subject leader is to:

- Prepare and update policy
- Prepare a subject development plan annually
- Plan work with teachers as required
- Review and contribute to teachers planning in line with the schools monitoring cycle
- Monitor teaching and learning in line with the schools monitoring cycle
- Monitor coverage of key skills taught within KS1 and KS2
- Lead staff meetings as required
- Plan and lead INSET activities as required
- Provide in-class teaching support and advice as required
- Order resources in consultation with staff

Resources and Accommodation

Digital Plan BEE curriculum resources are stored on the school server. Design and Technology materials and tools are boxed and labelled and kept in a central area. Resources should be collected from this area, by an adult, before the Design and Technology lesson and returned by an adult after use.

The Design Technology subject leader will purchase and replace resources as necessary.

Inclusion

The Design and Technology curriculum meets the specific needs of individuals and groups of pupils by including the 3 essential principles of:-

- Setting suitable learning challenges
- Responding to pupils diverse learning needs
- Overcoming potential barriers to learning and assessment for individuals and groups of pupils

Differentiation

It is the responsibility of all teachers to ensure that pupils with Special Educational Needs are able to access the Design and Technology curriculum as fully as possible and make the greatest progress possible.

It is the responsibility of all teachers to ensure that pupils with Special Physical Needs are able to access the Design and Technology curriculum as fully as possible. This may require the teacher to provide different materials or tools for that child to use or provide the child with more adult support.

Health and Safety

Health and safety is very important when working with the tools, equipment and resources required for the teaching and learning of Design and Technology. Children need to be taught how to use tools and equipment correctly, recognise hazards and control risk. Together, staff have carried out assessments for most situations that may arise during a DT lesson. The completed Risk Assessment Forms are stored in a file in the staff room. The class teacher is responsible for carrying out additional assessments for any activities where a risk assessment is deemed appropriate as they arise.

Appendix 1

WHOLE SCHOOL CURRICULUM OVERVIEW FOR DESIGN TECHNOLOGY YEAR A			
	AUTUMN	**SPRING**	**SUMMER**
EYFS	Due to the nature of the Early Years Foundation Stage topics, coverage and skills are not pre-planned. Learning opportunities come from children's abilities and interests. Guidance for skills are taken from the Development Matters Document under the heading 'Expressive Arts and design.' **What this might look like in the Foundation Stage?** • We have daily opportunities to make our own creations using a wide range of different materials, fixings and tools which are freely available in continuous provision. • We are taught how to use tools such as scissors, hole punch, string, sellotape, cutters etc. • We are encouraged to talk about what we would like to make, how we will do it and what we think about it when it is finished. • WE are encouraged to evaluate what we have made and make changes as appropriate. • We take part in stay and make sessions, where parents are invited to come in and make things with us.		
CLASS 2 Y1/Y2	STABLE STRUCTURES (1)	HEALTHY PIZZAS (2) STEM CHALLENGES	PUPPETS (2))
CLASS 3 Y3	BRITISH INVENTORS (3)	HEALTHY PIZZAS (2) STEM CHALLENGES	PUPPETS (2)
CLASS 4 Y4/Y5	SEASONAL STOCKINGS (4)	FOOD (HEALTH WEEK) STEM CHALLENGES	MAKING MINI GREENHOUSES (4)
CLASS 5 Y5/6	BIRD HOUSE BUILDERS (6)	FOOD (HEALTH WEEK) STEM CHALLENGES	PROGRAMMING PIONEERS (6)

WHOLE SCHOOL CURRICULUM OVERVIEW FOR DESIGN TECHNOLOGY YEAR B			
	AUTUMN	**SPRING**	**SUMMER**
EYFS	Due to the nature of the Early Years Foundation Stage topics, coverage and skills are not pre-planned. Learning opportunities come from children's abilities and interests. Guidance for skills are taken from the Development Matters Document under the heading 'Expressive Arts and design.' **What this might look like in the Foundation Stage?** • We have daily opportunities to make our own creations using a wide range of different materials, fixings and tools which are freely available in continuous provision. • We are taught how to use tools such as scissors, hole punch, string, sellotape, cutters etc. • We are encouraged to talk about what we would like to make, how we will do it and what we think about it when it is finished. • WE are encouraged to evaluate what we have made and make changes as appropriate. • We take part in stay and make sessions, where parents are invited to come in and make things with us.		
CLASS 2 Y1/Y2	VEHICLES (2)	EAT MORE FRUIT AND VEGETABLES (1)	STEM CHALLENGES
CLASS 3 Y3	VEHICLES (2)	FOOD (HEALTH WEEK) STEM CHALLENGES	LIGHT UP SIGNS (3)
CLASS 4 Y4/Y5	BUILDING BRIDGES (5)	FOOD (HEALTH WEEK) STEM CHALLENGES	CHINESE INVENTIONS (5)
CLASS 5 Y5/6	BUILDING BRIDGES (5)	FOOD (HEALTH WEEK) STEM CHALLENGES	CHINESE INVENTIONS (5)

WHOLE SCHOOL CURRICULUM OVERVIEW FOR DESIGN TECHNOLOGY YEAR C			
	AUTUMN	**SPRING**	**SUMMER**
EYFS	Due to the nature of the Early Years Foundation Stage topics, coverage and skills are not pre-planned. Learning opportunities come from children's abilities and interests. Guidance for skills are taken from the Development Matters Document under the heading 'Expressive Arts and design.' **What this might look like in the Foundation Stage?** • We have daily opportunities to make our own creations using a wide range of different materials, fixings and tools which are freely available in continuous provision. • We are taught how to use tools such as scissors, hole punch, string, sellotape, cutters etc. • We are encouraged to talk about what we would like to make, how we will do it and what we think about it when it is finished. • WE are encouraged to evaluate what we have made and make changes as appropriate. • We take part in stay and make sessions, where parents are invited to come in and make things with us.		
CLASS 2 Y1/Y2	STEM CHALLENGES	HEALTHY PIZZAS (2)	MOVING MINI BEASTS (1)
CLASS 3 Y3	STEM CHALLENGES	HEALTHY PIZZAS (2)	STORYBOOKS (3)
CLASS 4 Y4/Y5	STEM CHALLENGES	SEASONAL FOOD (4)	FASHION AND TEXTILES (5)
CLASS 5 Y5/6	STEM CHALLENGES	BURGERS (6)	FASHION AND TEXTILES (5)

Appendix 2

ST JOSEPH'S CATHOLIC PRIMARY SCHOOL, WRIGHTINGTON
DT WHOLE SCHOOL DATA ????

Year Group	Ahead	On track	Below
RECEPTION ??? pupils			
Being Imaginative/ Exploring and Using Materials	**EXCEEDING**	**EXPECTED**	**EMERGING**
AUTUMN ???			
SPRING ???			
SUMMER ???			
Year 1 – ??? pupils			
AUTUMN ???			
SPRING ???			
SUMMER ???			
Year 2 –??? pupils			
AUTUMN ???			
SPRING ???			
SUMMER ???			
Year 3 –??? pupils			
AUTUMN ???			
SPRING ???			
SUMMER ???			
Year 4 – ??? pupils			
AUTUMN ???			
SPRING ???			
SUMMER ???			
Year 5 –??? pupils			
AUTUMN ???			
SPRING ???			
SUMMER ???			
Year 6 – ??? pupils			
AUTUMN ???			
SPRING ???			
SUMMER ???			