QEGSMAT



St. John's CE Primary School Wetley Rocks

Design and Technology Intent, Implementation, Impact.

"Shine like the star you are."

"You are the light of the world. A town built on a hill cannot be hidden.

15 Neither do people light a lamp and put it under a bowl, instead they put it on its stand, and it gives light to everyone in the house. In the same way, let your light shine before others, that they may see your good deeds and glorify your Father in heaven."

Matthew 5:14-16

Our Values

Strength: have the strength to stand up for what is right. Be a courageous advocate.

Hope: to be people of hope. Have hope when times are dark and difficult. Keep positive and be resilient – there is light at the end of the tunnel.

Individuality: embrace and celebrate our differences. God made us all unique and this is a very special thing.

Nuture: cherish, care for, encourage and protect everything in God's world - including yourself.

Excel: fulfil your God given potential; be the best you can be. Shine like the star you are.

Design and technology Intent

At St. John's, the Design and technology scheme of work aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. All Design and Technology teaching is linked to the values of our trust, school and to the six essentials of good practice in the subject which are consistent with the National Curriculum: user; purpose; functionality; design decisions; innovation and authenticity. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Through our scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements. We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum. We want Design and Technology to prepare our children, to give them the opportunities, responsibilities, and experiences they need to be successful in later life.

The D and T Curriculum and St John's Values:

Strength: the pupils have the strength to take on the views of others when working collaboratively on a project. They are able to recognise the strengths they themselves and others bring to the group and have the strength to be critical friends and act on feedback to improve their products. They have the strength of conviction to support their decisions and adjust designs in view of other's feedback.

Hope: the pupils are able to express, acknowledge and recognise their own thoughts in a safe environment. They show resilience by applying an iterative process to their designing and making of products.

Individuality: pupils are actively encouraged to use their creativity and pique their curiosity about the world. Our scheme of work is deliberately flexible and less prescriptive to allow the teachers along with the pupils to decide what products they will design and make, who their products will be for and what purpose they will perform.

Nurture: through design and technology, the pupils are able to show respect and admiration of their peers. They celebrate the achievements and progress of others and act as a critical friend in a sensitive manner. They show mutual respect and value the opinions of others.

Excel: due to the inspiring, rigorous and practical nature of design and technology all pupils have the potential to shine in this subject. We aim to impart the knowledge in a way that children understand they can influence the future and make a difference.

Implementation:

Early Years Foundation Stage.

During the EYFS pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities. In the statutory Early Years Framework, the role of Design and Technology is specifically named in the area of learning 'Expressive Arts and Design'. They have the opportunities to learn to:

- Use different media and materials to express their own ideas.
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose.
- Make plans and construct with a purpose in mind using a variety of resources.
- Develop skills to use simple tools and techniques appropriately, effectively and safely.

- Select appropriate resources for a product and adapt their work where necessary
- Cook and prepare food adhering to good health and hygiene routines

At the end of Early Years, staff will report on the children's progress within these areas and if they meet the expected level of development.

KS1 and KS2

Design and Technology is a crucial part of school life and learning and it is for this reason that as a school we are dedicated to the teaching and delivery of a high-quality Design and Technology curriculum. At St. John's we use the Kapow scheme of work based on Projects on a Page from the Design and Technology Association. This is implemented through:

A well thought out, whole school, yearly overview of the DT curriculum which allows for progression, revisiting and building complexity, across year groups in all areas of DT (textiles, mechanisms, structures, food, electrical systems and the digital world). Lessons incorporate a range of teaching strategies from independent tasks, paired and group work which includes practical hands-on, computer based and inventive tasks. Differentiated and scaffolded tasks ensure lessons are accessed by all pupils.

Use of the Kapow scheme allows access to a series of developmental steps to help assess whether children are on track to meet the end of Key stage expectations. Along with the National Curriculum expectations, the Kapow progression framework also includes elements for pupils and staff that they consider fundamental to children's progression.

Well planned and resourced units providing children with a hands-on and enriching experience.

A range of skills being taught ensuring that children are aware of health and safety issues related to the tasks undertaken.

Teachers being given ownership and flexibility to plan for Design and Technology; often teaching DT as a block of lessons to allow the time needed for the children to be critical, inventive and reflective on their work.

Each unit of work from Year 1 to Year 6 addressing the principles of designing, making, and evaluating and incorporating relevant technical knowledge, vocabulary and understanding in relevant contexts.

Pupils being introduced to specific designers, chefs, nutritionists, etc. helping to engender an appreciation of human creativity and achievement and increase the cultural capital from which they can draw in the future.

Pupil's skills and knowledge are assessed by the class teacher, throughout lessons and a summative assessment is completed termly. Each lesson includes guidance to support teachers in assessing pupils against the objectives. Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/or end of unit. This informs the Design and Technology coordinator of any further areas for curriculum development, pupil support and/or training requirements for staff.

Impact:

Children will have clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum. Through carefully planned and implemented learning activities the pupils develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They gain a firm foundation of knowledge and skills to see them equipped to take on further learning in secondary education and be innovative and resourceful members of society.