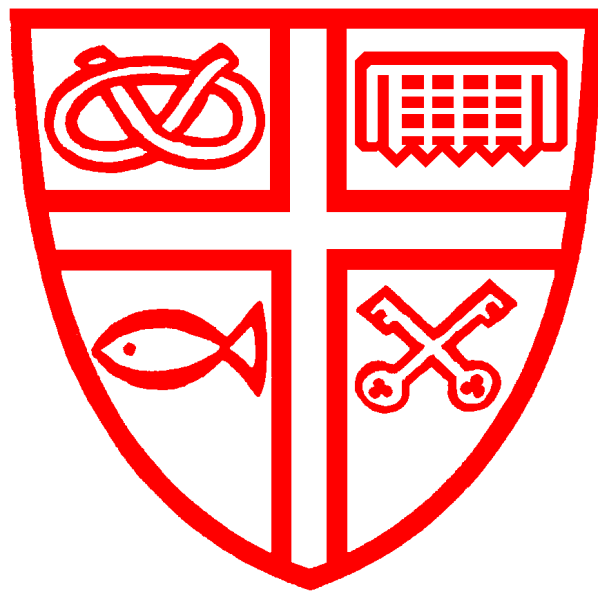


St Peter's CE(VA) Primary School

Love Christ
Love Learning
Love One Another



Design Technology

April 2020-2023

Vision Statement St Peter's (VA) CE Primary

"You shall love the Lord your God with all your heart, and with all your soul, and with all your strength, and with all your mind; and your neighbour as yourself." Luke 10:

At St Peter's the life and teachings of Jesus Christ are at the heart of our school. Here pupils are valued, cared for and developed to their fullest potential; spiritually, intellectually and physically. The nurturing environment encourages and challenges the pupils to be creative, responsible, tolerant and have a love of learning to become citizens of the World who contribute to society.

DT Vision:

St Peter's prides itself on providing a rich and full curriculum, which will inspire the future generation of artists and designers. To open up learning opportunities that engage and encourage a thirst for knowledge is essential to promote progress and understanding. By the completion of year six we want the children to have the desire to expand their knowledge in these subjects as they continue their learning journey. In art and DT, we would like them to have experienced a wide range of materials, tools and techniques and be able to apply these in a variety of ways incorporating a wide range of skills learnt throughout previous years.

The core skills of art are: drawing, painting, printing, collage, digital media, sculpture, perspective, composition, proportions, knowledge of art materials and applying them using different techniques. The core skills of DT are: following a design brief, research, developing designs linked to research, market research, using a range of materials and tools and evaluating products.

At St Peter's our foundation subjects are covered through topic. In KS1 the topic units run on a two year rolling programme, which allows all children to cover all the units before progressing into KS2. In KS2 each class has two history units, one geography unit and either an art, or a DT unit. For art and DT each KS2 class has a unit that they repeat annually, allowing all subject skills to be utilised across the whole of KS2. These subjects are taught throughout the school, with each year group working on the same key objectives, which are derived from the NC. These objectives are differentiated through the year groups through key questions, to show progression and to ensure that all areas of learning are covered throughout the children's school careers. Having the same objectives allows for them to be revisited year on year and them become embedded learning.

Where appropriate topic subjects start with a themed hook, such as an experience day, to engage the children and produce enthusiasm for their learning. The children take part in shared learning with other year groups, which can include event days and shared

key stage trips, relevant to the topic being covered. Every topic has a topic learning pathway which details the subjects that the children will be learning, introduces the vocabulary and the key questions covering the topic. This allows children to interact with their learning, see progression with the topic and access key vocabulary, which is the first building block of each topic.

By the end of year 6 we would like our pupils to have developed a range of creative skills and be able to apply these skills using a range of equipment and tools. We would like our pupils to become critics of their own creative work and the work of other artists. We would like our pupils to leave St. Peter's school with a rich knowledge of artists and designers to inspire them creatively in the future.

Intent

- Development of resources and approaches to challenge, engage and motivate pupils in DT.
- Improving verbal and written explanations in DT lessons and in STEM.
- Improving creative skills and pupils' understanding of DT.
- Raising attainment over all key stages.
- To build upon the best primary practice of learning where possible through a progression of skills outlined on the DT progression map.
- To develop knowledge and understanding of important designers.
- To explore a range of tools, techniques and materials that build on prior learning.
- To experience a range of skills.

Our teaching of DT ensures that the National Curriculum DT objectives are taught on a rolling programme of study for KS1 and KS2 where skills and objectives are progressive across the school through the use of an DT progression map.

Assessment for Learning is used throughout the teaching of DT, informing planning and directing pupil progression creatively. (Appendix 3)

We have KS1 and KS2 rolling programme of study. The F1 and F2 planning is closely linked to the Foundation Stage Early Learning Goals and is mainly cross-curricular. **KS1 DT** work is planned to link with other curriculum topics and taught within topic blocks. **KS2 DT** work is planned as 2 shorter units per year on a 2 year rolling programme and is linked to science topics. Pupils must cover: electrical systems, structures, cookery, computing, textiles, pneumatics and mechanical systems in KS2. The DT progression map is carefully referred to and utilised to ensure continuity and progression of DT across key stages.

At St Peter's we recognise that developed, thorough, focused DT planning leads to effective teaching and learning of the DT curriculum.

- Staff have a clear understanding of the DT curriculum, long term planning and topic overviews, and how the DT curriculum is built at St Peter's. They make pertinent links to previous DT skills as well as devising activities to practise new skills and learning.
- Staff fully understand the expectations of the DT curriculum coverage and standards of the year group they teach.
- Subject knowledge of DT is strong and common misconceptions are understood and planning takes this into account.
- Planned DT work by the use of paddling, swimming and diving, meets all the needs of the class from challenge for the able children, those who need scaffolds to develop.
- Ensuring that the children will be pushed to meet their own potential.
- Planned DT lessons where pupils are encouraged to discuss the work of designers with use of DT vocabulary.
- Planning DT lessons that allow pupils to apply skills and techniques inspired by studying an designers to their own work.
- Planned DT work will always be purposeful ensuring learning is progressing.
- Careful planning and organisation will ensure that staff are always prepared to give a high quality DT lessons.
- Teachers effectively deploy a wide variety and range of suitable materials and appropriate resources.
- Teachers set clear learning objectives which are appropriate for the particular age and stage, and these are well understood by the learners themselves.

Related Policies / Documents

- Rolling DT programme 2020-2024/mid term planning
- Curriculum planning file
- DT topic overviews
- Teaching and learning policy
- Marking Policy

Implementation

At St Peter's we recognise that each staff member brings different styles and skills to DT. However, to ensure that there is a consistent approach across year groups teachers need to follow the following ethos as the foundation for their practise.

- Staff follow expectations for teaching and learning of DT set out by the subject leader and school policies.
- Teachers use DT vocabulary during DT lessons

- Teachers use the correct lesson objectives for DT (same as topic) and ensure that ample opportunity is given to meet all DT skills each year.
- Teachers use the DT medium term planning of objectives to plan and develop suitable lessons.
- Effective use of time is essential with pupils getting off to a flying start at the beginning of each DT lesson.
- All staff must model the highest standard of English and maths through their teaching of DT.
- Understand how children learn and incorporate into lessons the teaching style most appropriate for the year group.
- Staff must create a positive atmosphere for learning during DT lessons, including following the behaviour policy, providing a stimulating learning environment, promoting independence and responsibility, pushing the children out of their comfort zones and celebrating effort and success.
- Through daily DT lesson plans, Staff share high expectations at the beginning of the lesson and provide a clear picture of what work is expected, what the standard of work looks like and model what pupils should be doing.
- Encourage pupils to challenge themselves and aim high in DT lessons when choosing paddling, swimming or diving activities.
- Staff share information in a clear manner that has been planned to reduce cognitive overload.
- Staff use a range of styles / pedagogies which fit children's needs - scaffolding, modelling, questioning etc.
- Staff provide guidance throughout the DT lesson to push progress.
- Staff adapt lessons / suite of lessons to ensure that children are meeting the standards for their year group and to make lessons inclusive for all.
- Staff support children to reflect on learning each lesson against focused objectives.
- Staff ensure that previous learning is constantly reinforced and maintained during DT lessons
- Children are involved in their own learning:-
- Children understand how learning links together through the use of learning pathways.
- Children know what they are learning that session through learning objectives and why it is important / links with outcomes being explicit.
- Children have a clear understanding of what they are learning during DT lessons and can verbalise this rather than just saying what they are doing.
- Children will know what they need to include for their work to be successful by using the success criteria displayed during DT lessons.
- Children will self-check and self-assess independently and through set tasks.
- Children will work with one another to share positives and spot areas for development through peer assessment.

- Children are encouraged to drive the learning and ask questions so they are active participators in their own learning.

Related Policies / Documents

- Teaching and Learning policy
- Learning environment / resources policy (appendix 2)
- Assessment for Learning Expectations (appendix 3)

Teaching Methods and Resources

We believe that the best way to learn DT is through first - hand experience, through a range of contexts and in light of different designers.

A range of teaching resources are used which include:

Computer-bases packages and concept

Espresso Programme

BBC Bitesize

PowerPoints showing the work of designers.

A DT Resource Centre has been established with science and is organised by the DT Coordinator. All equipment is labelled and stored in its own place. It is the responsibility of the staff to return all equipment to the DT Resource Centre. The Co-ordinator maintains oversight and purchases new material sources at regular intervals.

We aim to use a range of secondary sources: video and DVD, IT software, intranet and internet and continue to investigate new ways of recording through ICT.

Digital cameras and ipads are often used to take pictures and assist with DT work.

Impact

- Staff constantly review DT lessons and practise ensuring effective teaching and learning is happening or understanding what changes need to be made to future teaching.
- In DT lessons and throughout DT units, children are given timely oral feedback to ensure that misconceptions are addressed and to push learning on.
- Children know how well they have done through positive marking and feedback in DT STEM books.
- Children will be encouraged to make their work better through feedback.
- Teaching points in the form of verbal feedback during DT lessons move children forward in their learning and are acted on in DT lessons.
- DT skills assessments are filled in after DT units.
- Staff analyse data regularly using the data to adapt planning, regroup children, provide children with personalised targets, celebrate successes.

Related Policies / Documents

- Assessment Policy
- Feedback and marking strategies (appendix 5)

Professional Responsibilities:

- Staff model positive attitudes to learning.
- Parental support is encouraged to help support children at home and give parents a clear idea of what is expected of the children this is done through half termly data sharing, termly parents evening, open door policy and yearly written reports.
- Staff hold accountability for pupil outcomes and complete data analysis termly.
- Staff attend and provide continuing professional development, support and keep up to date with developments in education.

Monitoring of DT



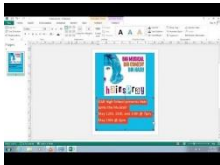
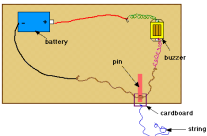

The role of the DT co-ordinator is:







- To co-ordinate the teaching of DT throughout the school
- To be involved in the induction of new staff
- To keep up to date with training
- To monitor the use of the policy and scheme of work
- To ensure continuity and progression of the teaching and learning of DT across the key stages and the school
- To make changes to the policy and scheme of work if necessary.
- To order and maintain resources
- To make staff aware of changes/thinking in DT
- To support staff who are less confident with DT
- To make staff aware of DT courses on offer and encourage them to attend
- To provide where necessary, staff training and development
- To show by example good DT practice.



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DT Curriculum Coverage

Year A/C	Electricity	Humans
Y3/4	<u>Electrical Systems/Structures</u> Camping lamp (See DT book for image)	<u>Cookery</u> Sandwiches 
Y4/5	<u>Textiles/ Electrical systems</u> Christmas Top with Light 	<u>Computing</u> Package design- food product Computing based 
Y5/6	<u>Electrical Systems/Structures</u> Burglar Alarm Mat Step on switch and buzzer sounds 	<u>Cookery</u> Food- Savoury Baking (soup) 

Year B/D	Animals	Sound/Forces
Y3/4	<u>Textiles</u> Hand animal puppet 	<u>Structures</u> Make a stereo 
Y4/5	<u>Pneumatics/Mechanical Systems</u> Pneumatic animal using a pump and balloon to move the mouth. https://www.youtube.com/watch?v=5QqinrOcbIM 	<u>Structures</u> Make a boat with a sail- Forces 
Y5/6	<u>Structures</u> Pet home 	<u>Mechanical Systems (cams and levers)</u> Make a boat that moves on the waves using cams and levers. https://www.youtube.com/watch?v=FM https://www.youtube.com/watch?v=zzM 



Assessment for Learning Expectations DT

- DT skills ladders completed and up to date.
- To ensure all DT skills are covered by the end of the year.
- Clear learning objective and skill to be focused on in DT lessons.
- Success criteria and key DT vocab displayed for lessons.
- High expectations of presentation and content in sketchbooks.
- GD pupils should be using more complex DT skills and DT vocabulary.
- DT lessons well differentiated, i.e opportunity for GD pupils to be more independent in their creativity.
- Use Bloom terminology, explain, prove, justify, the use of 'why?' to help pupils think more deeply about their DT work.
- DT lessons challenge pupils' thinking about their choices and implementation of DT skills.
- Verbal feedback in DT lessons brings more children forward in their learning and into deeper thinking creatively.
- Progression in punctuation display is referred to in DT lessons.
- Include peer assessment
- Ensure children are on task
- Higher expectations for presentation
- Topic learning pathways for DT with a clear progression of skills leading to a final piece.
- Parent leaflets to include DT.
- Griffin learning referred to in lessons
- DT vocabulary used in DT lessons.