Design and Technology Policy

Reviewed and Updated:

February 2018

School Vision and Mission

Our vision is that every single member of our community will love, learn and grow together. This is achieved by:

- Celebrating what we are good at
- Challenging ourselves and doing our very best in our work
- Loving and respecting ourselves and each other
- Knowing that we are loved for being just how God made us
- Accepting that everyone is special

To achieve these aims all learners, staff, parents and governors will work together.
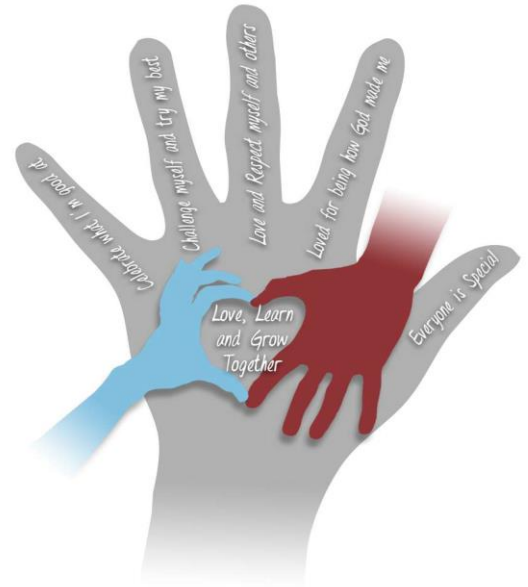
School Aims

*To provide an exciting curriculum with learning activities that enthuse, engage and motivate children to learn and foster their curiosity, enquiring mind and enthusiasm for learning, allowing each child to achieve their full potential.

*To provide a secure and safe environment, for children to work and play, in which they are encouraged to develop moral values and respect for others

*To provide multicultural links representative of our children's family cultures and backgrounds.

• To provide a learning environment that is ordered, in an atmosphere that is purposeful and where children feel safe

• To foster strong links between home and school, recognising the importance of parental involvement in their children's learning ensuring they are valued

*To give children an education for life, where they are able to learn how to become effective and reliable members of the wider community and foster ambition and expectation to carry through to adult life

Expectations and Standards

Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. They are taught to look for opportunities and to respond to them by developing a range of ideas and making a range of products. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators.

Aims and Objectives *(National Curriculum 2014)*

The national curriculum for design and technology aims to ensure that all pupils:
- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

Aims:

• to develop children' designing and making skills,

• to teach children the knowledge and understanding, within each child's ability, that will be required to complete the making of their product,

• to teach children the safe and effective use of a range of tools, materials and components,

• to develop children's understanding of the ways in which people have designed products in the past and present to meet their needs,

• to develop children's creativity and innovation through designing and making,

• to develop children's understanding of technological processes, their management and contribution to society

Planning, Progression and Continuity

We carry out the curriculum planning in design and technology in three phases: long, medium and short term within/linked to the topic planning. The long-term plan maps out the skills to be covered during the key stages. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term.

We plan the activities in design and technology so that they build upon prior learning of the children. We give children of all abilities the opportunity to develop their skills, knowledge and understanding and we also build planned progression into the scheme of work, so that the children are increasingly challenged as they move through the school.

The planning will be completed through a cross curricular approach ensuring the DT has a link to the topic being studied. Teachers will give each DT theme a purpose.

For each of these sections, there are separate objectives for KS1 and KS2. Teaching staff from each Key Stage have discussed which of these objectives are most appropriate for each year group and these have been divided up. By dividing these in to year groups, full coverage of the curriculum is ensured. Our curriculum planning is based on a 1- year cycle (see Appendix 1). Staff then plan medium and short term plans from the long term plan.

We plan on a 1-year cycle to ensure each year group covers the required objectives. A 1 -year cycle ensures children are taught knowledge and skills (see appendix 2) that are progressive and can be built upon each year. Our long-term overview maps the design and technology topics studied in each term during each key stage. In some cases, we combine the design and technology study with work in other subject areas, especially science and maths. At other times we arrange for the children to carry out a design and technology study independently. British values and multicultural links are made throughout.

Each class teacher creates a plan for each lesson, including specific learning objectives. Children of all abilities have the opportunity to develop their skills and knowledge in each unit and, through planned progression built into the scheme of work, we offer them an increasing challenge as they move up the school.

Throughout, teachers ensure English and maths skills are incorporated into science and technology study, allowing core subjects to be built upon through a range of topics. Where appropriate ICT is used, for example: child led research, design work and photographs for analysing.

Assessment, Feedback and Marking
It is expected that work will be assessed in keeping with the school's assessment policy. We assess the children's work in geography by making informal judgements as we observe the children during lessons. Work will be differentiated by ability where necessary and once children have completed a piece of work it will be marked according to the school marking policy. Where appropriate, children should be provided with feedback (verbal or written) which allows them to focus on the next steps in their learning. After receiving feedback children should have the opportunity to respond to it.
A review of assessment in all foundation subjects is underway – January 2018

Inclusion
We teach design and technology to all pupils, whatever their ability. We provide learning opportunities that enable all pupils to make progress. We do this by setting suitable learning challenges and responding to each child's different needs.

Where pupils are to participate in activities outside the classroom, we carry out a full risk assessment prior to the activity, to ensure that the activity is safe and appropriate for all pupils.

Resources
Our school has a wide range of resources to support the teaching and learning of this subject across the school. These are kept in the DT cupboard between year 3 and 4. Classes also have resources for their specific topics in their classrooms.

Role of Subject Leader
The expectation of subject leaders is outlined in appendix 3.

Role of Teacher Teachers
Class teachers are responsible for the learning and progress in geography for all the children in their class, as well as planning and resourcing appropriately differentiated learning opportunities.

Appendix 1
Long Term Plan

Y1	Term 1 and Term 2	Term 3 and Term 4	Term 5 and Term 6

	Colour, tone, portraits, Warhol and clay	Texture, weaving, sculpture	Observational drawing – fruit, printing –fruit, Arcimboldo, Van-Gough
Y1 ART	- Colour mixing (primary to create secondary), and creating tonal shades. - Identify primary and secondary colours - Brush skills - Use different types of paint - Drawing self-portrait in pencil, looking at position, shape, and basic proportion. - Share ideas on art work by Andy Warhol. - Discuss similarities and differences in portraits from a range of artists. - Create a toy using clay, and create pattern using tools.	- Autumn pictures combining painting and a range of collage materials (paper and fabric). - Weaving using paper, card, textiles and recycled materials (plastic bags) - Sculpture using newspaper, straws and malleable materials to create a London landmark structure, using observation as inspiration. - Use paint and a range of materials to add texture to the paint (shavings, glitter, sand, rice, plaster etc.) - Create textured paper art created using techniques such as: cutting, rolling, twisting etc.	- Observational drawing in pencil and pencil crayon (fruit). - Observational painting (sunflowers) linked to Van-Gough (various scale) - Brush skills - Creating collage linked to Arcimboldo - Create imaginative, repeating patterned art using printing with a range of materials, including natural materials.

Communication Skills
- I can talk about how I feel about my own or somebody else's work.
- I can use drawing, collage and textiles to show my ideas about line, shape and colour.
- I ask questions to find out about artists and craft makers.

Application of Mathematics
- I describe and draw the shapes that I see, using words like:
    - Circle
    - Oblong
    - Rectangle
    - Triangle
    - Square
- I describe shapes in my art work by labelling them in my Art Sketch Book.

IT
- I use the computer to draw pictures with lines and shapes.
- I can change the pen colour.
- I can rub out if I need to change my work.
- I print out my best work and keep it in my Art Sketch Book.

Working With Others
- I can tell someone what I like about their Art and Design work.
- I can work in a group to make a large picture or model.

Improving Own Learning & Performance
- I can think of ways to improve my own work.
- I can describe the differences and similarities between my work and that of artists.

Problem Solving
- I can think of ideas for Art from:
    - Looking at things made by people
    - Looking at the natural world.

Shape, space, texture, colour, line, tone, pattern & form

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Y2 ART	Painting (2D) - Pete McKee/ Lichenstein *bright, dull, light, dark, thick, thin, watery, blending, bright and dull, light and dark colour*		JMW Turner- impressionist Painting Digital photography art Printing (2D) *- relief (raised surface), frottage (rubbings), roller, printing ink,*	Major art movements – pointillism George Seurat- painting		Sculpture – animals Clay African artist Sculpture (3D) - clay *coil pots, slip, malleable, form, three-dimensional*

Communication Skills
- My ideas are shown in my: drawings, paintings, collage work, printing, sculpture and photographs.
- I am always looking at: lines, patterns, textures, shapes, colours.
- I can recount my work in my Art Sketch Book.
- I ask questions to find out about artists and designers.

Application of Mathematics
- I make 2D and 3D shapes.
- I can describe the properties of shapes using mathematical vocabulary.

IT
- I use a digital camera to take images of things people have made and the natural world. I look at: lines, patterns, textures, shapes, colours.

Working With Others
- I work as part of a group when I am observing, investigating or making.
- I know about art from other cultures.

Improving Own Learning & Performance
- I can talk about the similarities and differences between my own and others' work, including artists and designers.
- I adapt and improve my own work.

Problem Solving
- I investigate drawing, collage, printing, sculpture and photos to see how I can best use them to get across my ideas.

Shape, space, texture, colour, line, tone, pattern & form

	Term 1 and Term 2	Term 3 and Term 4	Term 5 and Term 6
Y3 Art	**Stone Age Painting** **Weaving landscape scenes** **Stone Age Jewellery**	**Mosaics**	**Sculpture- Barbara Hepworth**
Y3 Design Technology	**Food- Hunter Gatherers**	**Bridge Building**	**Textiles- Greek puppets/ Costumes**

Communication Skills
- My ideas are shown in my: Drawings, Paintings, Collage work, Sculpture, Photographs.
- I write about my ideas, using 'annotation' in my Art Sketch Book.
- I can say what I think and feel about the work of others and my own.
- My skills in: drawing, painting, collage, sculpture, and photography help me to communicate my ideas, using: colour, pattern, texture, line & tone, shape & form.

Application of Mathematics
- I recognise and use reflective symmetry in shapes and patterns that I create.
- I recognise right angles in shapes or objects.
- I can use the properties of shapes to explore patterns *(e.g. tessellation, Islamic Art etc.)*.

IT
- I change my digital images using the computer.
- I use the computer to alter images and to combine with other images.
- I use a paint package to alter scanned images.

Working With Others
- I work as part of a group when I am observing, investigating or making.
- I know about artists, designers and architects from history.
- I am beginning to understand the viewpoints of others by looking at images, people, and places and so on, from a different angle.

Improving Own Learning & Performance
- I keep notes of how I would change my work in my Art Sketch Book.
- I compare my work to that of famous artists or designers in history.
- I suggest improvements to my work and keep notes in my Art Sketch Book.

Problem Solving
- I can select visual information about people to show in my portraits.
- I experiment with ways of framing images.
- I experiment with different materials and techniques to find the best one for the *purpose* of my work.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Y4 Art & Design	Looking at Book of Kells	Creating an Anglo-Saxon House	Jelling and Borre style art.	Creating a Viking Boat	Greek Sculture	Greek Architecture

Communication Skills
- I can show relationships between people in my drawings.
- My skills in: drawing, textiles, sculpture, and photography help me to communicate my ideas, using: colour, pattern, texture, line & tone, and shape & form.
- I look at familiar still life objects to paint and draw.

Application of Mathematics
- I recognise and draw parallel and perpendicular lines.
- I can visualise and make 3d shapes from 2d drawings.
- I use the Internet to research artists, architects and designers.

IT
- I use the printed images I take with a digital camera and combine them with other media.
- I present a collection of my ICT work on a slide show presentation.
- I scan images and take digital photos and use software to alter them, adapt them and create work with meaning.

Working With Others
- I can make useful comments on the ideas of others.
- I can describe and explain art from other cultures, and know how artefacts came to be in museums.
- I compare and discuss my ideas with others.

Improving Own Learning & Performance
- I adapt and improve my work, thinking about the *purpose* of the work.
- I keep notes about the purpose of my work in my Art Sketch Book, using labels, captions and short paragraphs.

Problem Solving
- I know that art can be both visual and tactile. I choose the best combination for my work.
- I investigate shapes, patterns and textures.
  I take meaning from: images, stories, drama, music, natural world, and artefacts to generate ideas for my work.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Y5 Art & Design	Local artist Joe Scarborough/Lowry - Painting	Textiles – Christmas tree decorations	Sculpture – Egyptians clay	Sculpture – Egyptians clay	Observational drawing Human form	Observational drawing Human form

Communication Skills
- My work uses both visual and tactile qualities – sometimes they are combined in one piece of work.
- My work communicates movement as well as still life.
▪ My work has a purpose and a meaning. I use: drawing, painting, collage, print, digital media, textiles, and sculpture in my work.

Application of Mathematics
- I know that a full rotation is 360° and I make patterns that rotate.
- My 3d and tactile work includes a range of shapes such as pyramids, prisms, triangles and quadrilaterals.
- I make 2d and 3d shapes that are accurate.
- I use language such as *angles, faces, pairs of parallel lines, symmetry*.

IT
- I use the Internet for research.
- My work includes: video, images, visual effects, sound and animation to convey meaning and purpose.

Working With Others
- I understand about a range of other cultures' art and design and use this as inspiration for my own work.
- I work on group projects, sharing my ideas and listening to others to design artefacts.

Improving Own Learning & Performance
- I keep notes in my Art Sketch Book about how I might develop my work further.
- I learn about the work of artists, architects and designers through looking at their work in books, the Internet, visits to galleries and other sources of information.

Problem Solving
▪ I take meaning from: images, stories, drama, music, natural world, and artefacts to generate ideas for my work.
- I investigate how to organise and combine: line, tone, shape, and colour to represent figures and forms in movement.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Y6 Art & Design	**Photography/Poppy Artists** • My 2d work is refined and I experiment with styles to reflect my ideas. • I use software to design. • I look very carefully at the methods I use and make decisions about the effectiveness of my methods. • I combine: colour, pattern, texture, line & tone, and shape & form to suit the purpose of my work.	**Peg Rugs** • My 3d work involves: textiles and I use a number of techniques to represent my ideas • I can work as part of a group involved in a project to research, design and create an artefact or piece of art. • I link the materials I use to the idea that I have. • I combine: colour, pattern, texture, line & tone, and shape & form to suit the purpose of my work.	**Chocolate Wrappers/Art Deco** • I ask questions to find out about artists, designers and architects. • My 2d work is refined and I experiment with styles to reflect my ideas. • I combine graphics and text based on my research of commercial design (e.g. to create a logo for a club etc.). • I combine: colour, pattern, texture, line & tone, and shape & form to suit the purpose of my work.	**Chocolate** • I can work as part of a group involved in a project to research, design and create an artefact or piece of art. • I look very carefully at the methods I use and make decisions about the effectiveness of my methods. •	**Pottery – Greek** • My 3d work involves: sculpture, modelling, artefact desig and ceramics and I use a number of techniques to represent my ideas • I can work as part of a group involved in a project to research, design and create an artefact or piece of art.	**Trebuchet & Catapults** • My 3d work involves: sculpture, modelling, artefact design and I use a number of techniques to represent my ideas • I can produce work that includes technical aspects, such as architectural design and I use my knowledge of constructing angles to help me in this. • I can work as part of a group involved in a project to research, design and create an artefact or piece of art.

Communication Skills
- My 3d work involves: sculpture, modelling, artefact design, textiles, and ceramics and I use a number of techniques to represent my ideas.
- My 2d work is refined and I experiment with styles to reflect my ideas.
- I ask questions to find out about artists, designers and architects.

Application of Mathematics
- I use my knowledge of probability to make visual or other representations of the likelihood of an event.
- I can produce work that includes technical aspects, such as architectural design and I use my knowledge of constructing angles to help me in this.

IT
- I use software to design.
- I combine graphics and text based on my research of commercial design (e.g. to create a logo for a club etc.).

Working With Others
- I can work as part of a group involved in a project to research, design and create an artefact or piece of art.
- I negotiate and listen so that the process is collaborative.
- I ask questions to find out the cultural and social role of museums and galleries.

Improving Own Learning & Performance
- I look very carefully at the methods I use and make decisions about the effectiveness of my methods.
- I compare my methods to those of others and keep notes in my Art Sketch Book, allowing me to revisit ideas.
- I adapt and refine my work to reflect its meaning and purpose, keeping notes and annotations in my Art Sketch Book.

Problem Solving
- I work out which visual information I need and combine this with other information.
- I link the materials I use to the idea that I have.
- I combine: colour, pattern, texture, line & tone, and shape & form to suit the purpose of my work.

Appendix 3

Subject Leader Responsibilities

1. To be **accountable** for your area(s) of responsibility, including successes, issues, rate of improvement etc.
2. To articulate a clear **vision** for your area(s) of responsibility ensuring that it links seamlessly to our academy vision and mission based on an excellent and **up-to-date knowledge** of your area(s) and SJF.
3. To develop/implement costed **three-year action plan** to ensure a sustainable high quality provision.
4. To develop a **policy** for all areas of responsibility to ensure that all statutory requirements are addressed and then **review** and **develop** it to ensure that it remains current, reflects actual practice and takes account of changing needs and expectations.
5. To ensure that the curriculum relating your area(s) of responsibility fulfils all requirements of the **National Curriculum** and is rich, exciting, inspiring whilst promoting **British values** to all learners where appropriate.
6. To **champion** your area(s) of responsibility and ensure a high visibility throughout our setting in all classes and learning areas and that the quality of displays – including pupils' work - is high.
7. To develop **resources** to maximise opportunities for all pupils to enjoy and achieve.
8. To develop a robust and relevant **assessment** system for your area(s) of responsibility; which links to the National Curriculum and national expectations and use findings to inform the SLMT, SES and SIP.
9. To manage **assessment/tracking/data management** within area(s) of responsibility.
10. To **quality assure** provision and practice through **regular monitoring and evaluation** including the quality of planning, teaching and learning, children's work, pupil progress and achievement, displays and resources in order to identify and act upon areas of improvement/decline and strength/weakness.
11. To **report/feedback** on findings/actions/next priorities to the Leadership & Management Team, other staff, Governor and others where appropriate (including parents/carers, Ofsted, HMI, the local authority, the Diocese of Hallam, consultants working to support our development, network partners etc.).
12. To develop and support staff through focused 1:1 support and **CPD** related to area(s) of responsibility.
13. To **network** with colleagues in a range of other high quality settings – in Sheffield _and_ in other areas - to quality assure our provision, share best practice, learn lessons, moderate judgements about our provision and our pupils' outcomes within your area(s) of responsibility.
14. To ensure that all appropriate opportunities are taken to consolidate/raise **English and Mathematics standards** within your area(s) of responsibility.
15. To promote the increased and appropriate **use of ICT** within area(s) of responsibility.
16. To manage **pupil interventions** within your area(s) where appropriate in conjunction with the Leader for Inclusion – to ensure that _all_ learners are engaged.
17. To ensure **readiness for Ofsted** inspection in terms of your area(s) of responsibility.
18. To liaise with (and report to) your designated **Link Governor** regularly and the wider Governing Body when required.
19. To produce and share an **annual summary report** about subject area(s) for publication on the website.
20. To **help other subject leaders** in other areas where designated as the 'support'.