

Curriculum Statement for Design Technology



Belonging, Being, Becoming

The principle aims of Design Technology are:

- 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.

The core of our Design Technology curriculum is the National Curriculum for England.

A broad and balanced creatively driven design curriculum, helps our pupils to develop a creative flair and imagination when designer and making a product. This helps pupils to have a better understanding and increased knowledge of cultural capital and the vale that designers have in society.

The curriculum has been specifically sequenced in a logical progression to ensure that new knowledge and skills build on what has been taught before: Early Years to Year 6. This enables our pupils to know more and remember more. End points are clearly identified for each year group; time allocation has been carefully considered to provide children with opportunities to master key concepts and learn about designer who have made valuable contribution.



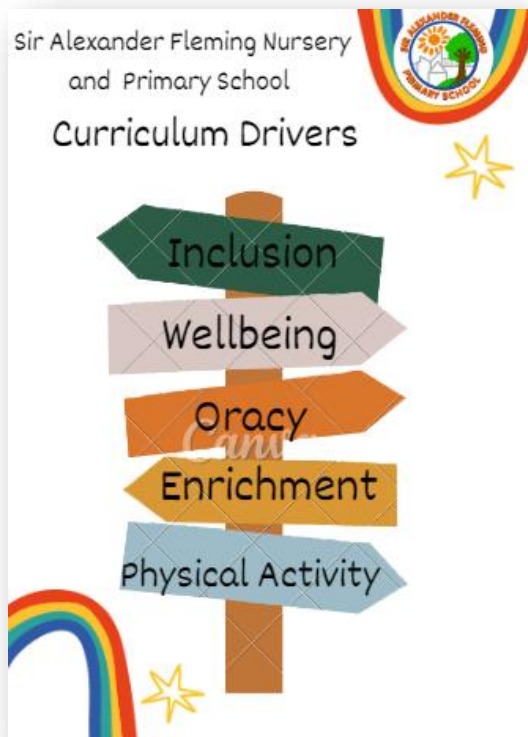
All children have access to a high-quality, ambitious Design Technology curriculum that is both challenging and enjoyable and raises pupil's aspirations. We widen their horizons through a context rich curriculum, that gives purpose to their learning, through high expectations for every child to succeed.

In each year group, there is a **yearly curriculum map** which defines the key areas of Design Technology which will be taught throughout the year. This ensures that enough time is given, and that coverage is allocated to each key

area. To ensure high standards of teaching and learning in Design Technology, detailed unit plans support teachers to plan a sequence of progressive weekly lessons and over time, giving the children time to master new concepts.

Detailed medium-term planning supports teachers to plan a sequence of progressive weekly lessons and over time, giving the children time to master new concepts. Within this document, key objectives and vocabulary are outlined. Progression documents are used to support the medium-term plan, to ensure that staff are delivering a consistent and challenging curriculum.

At Sir Alexander Fleming, we have five curriculum drivers that are central to our school vision and ethos. They help to drive and shape the curriculum and are incorporated across all subjects and themes.



Inclusion – All pupils participate in physical education. Each learner is an individual and we use a child centred approach to adapting our teaching to meet their need.

We make the following adaptations to the curriculum to ensure all pupils needs are met:

- Differentiating our curriculum to ensure all pupils can access it, for example, by grouping, 1:1 work, teaching style, content of the lesson etc.

- Adapting our resources and staffing.
- Using recommended aids, such as laptops, coloured overlays, visual timetables, larger font etc
- Differentiating our teaching, for example, giving longer processing times, pre-teaching of key vocabulary, reading instructions aloud, visual cues to accompany verbal instructions.

We use the NASEN 'Teacher Handbook: SEND' (2021) to further inform our inclusive practice by considering specific adaptations for each curriculum area.

Within a design and technology lesson, teachers check pupils understanding effectively and address any misconceptions swiftly. The curriculum is designed and delivered in a way that allows pupils to know more and remember more. Key concepts are embedded in their long-term memory so they can apply them fluently.

Wellbeing - We place emphasis on a curriculum that develops the whole child. Through our core values we ensure that the wellbeing of all members of the community is at the centre of our life in school and the key to raising academic success. Our children gain a sound knowledge of their own value and purpose, with the ability to make choices and decisions. In design and technology we

encourage children to explore and express their creativity, giving them the skills they need to develop confidence in expressing their own ideas and messages in a variety of ways.

Oracy – Our curriculum aims to develop learners who can think critically, reason together and have the vocabulary to express their knowledge and understanding. In design and technology oracy is developed through the children learning to articulate their opinions and feelings towards a range of creative work both of their own and when exploring the work of famous designers. Children learn to evaluate their work and the work of their peers through discussion and celebrations. Importance is placed on being able to articulate the processes that have been used to design, make and evaluate a piece of work overtime.

Enrichment - A range of visits or visitors into school are planned across the curriculum. These are organised by teachers, to offer experiences that help to broaden the understanding of curriculum content, enrich the curriculum delivery with real-life experiences and most importantly help the children embed and retrieve their learning. In Design Technology enrichment includes guitar lessons, drum lessons, a carol service at the local church, choir concerts and end of term performances.

Physical activity – Sport England Survey shows that active children are happier, more resilient and more trusting of others and it's also shown a positive association between being active and higher levels of mental wellbeing, individual development and community development. We build physical activity into design and technology through exploring and manipulating a variety of resources, tools and materials. When making a new produce children will often stand and move around to collect the resources and tools they need.



Within the EYFS curriculum includes rich opportunities for children to explore how to hold and use a variety of small tools, including scissors and cutlery in a useful and purposeful way. They learn how safely use and explore a variety of materials, tools, and techniques, experimenting with design, texture, form, and function. Throughout the whole of the Foundation Stage, the pupils will have opportunities to build and apply their understanding of design and technology in both the

indoor and outdoor classrooms, bringing nature into their designs at every available opportunity. They will share their creations, explaining the process they have used and celebrate their achievements.

In Key Stage One, they have the opportunities to develop a wide range of design and technology skills such as making annotated plans, experimenting with cutting and joining materials and moving mechanisms as well as understanding hygiene and healthy eating within food technology. The children build on skills learnt during EYFS and deepen their understanding of the process; design, make and evaluate. The children learn how to evaluate their design, share their designs with the class and receive feedback from their peers. They also have opportunities to improve their work. The children have opportunities to build and apply their understanding of design and technology outdoors with cross curricular links to science such as making an insect hotel.

Key skills and techniques learnt in KS1 are **built upon in KS2**, giving pupils the opportunities to master skills of making annotated designs, prototypes, final products and evaluating their work throughout the whole process. They understand it is ok to change their designs and adapt their work to make improvements. Alongside this, they continue to build on their knowledge of great designers with many links to other subjects such as science and computing. The children are encouraged to research themselves and use their creativity when designing. Within the lesson, teachers check pupils understanding effectively and address any misconceptions swiftly. The curriculum is designed and delivered in a way that allows pupils to know more and remember more. Key concepts are embedded in their long-term memory so they can apply them fluently.

Assessment is woven throughout the curriculum and is used by staff to check pupil's understanding of key concepts. At the beginning of each lesson the class teacher will share a learning objective and success criteria with the children. This informs them what they are learning and the steps they need to take to be successful. The teacher will assess the pupils against the success criteria. The assessment will be based on the pupil's application of taught knowledge through class discussion, answering questions, practical activities and if appropriate written work. This supports in identifying gaps in knowledge and understanding enabling teachers to respond appropriately. We also recognise the value of assessment as an important learning tool which provides opportunities for pupils to strengthen their memories through concerted effort.

In design and technology, pupils are consistently assessing their own work and adapting and developing their ideas as their knowledge increases. Children make prototypes and evaluate their design and work throughout the unit of work. Building confidence to critique work they have created to improve is something we take pride in as a school. Teachers assess knowledge retention and use of new skills without imposing ideas, making sure that the child's own creativity is tapped in to, enabling them to blossom into the artists they are as individuals.

The impact of our Design Technology curriculum is that:

- Pupils make progress in a range of design processes and techniques through taking risks, becoming resourceful, innovative and enterprising.
- Pupils know how design and technology has shaped the modern world, historically and culturally.
- Pupils understand the value of DT and how it is used in everyday life.
- Pupils are prepared for their next stage in DT education and beyond.
- Pupils understand and can apply the principles of a healthy and varied diet.