




















Design and Technology Curriculum





Ankermoor Primary Academy Curriculum



Aim	<p>Learn together, achieve together</p> <p>At <u>Ankermoor Primary Academy</u> we intend that all pupils, regardless of background, develop the knowledge and character needed to flourish in life.</p> <p>We aim to 'inspire all to excellence'</p>								
Trust Vision	Inspiring all to excellence								
Trust Values	<p>We care</p> 	<p>We leave no-one behind</p> 	<p>We celebrate individuality</p> 	<p>We are brave</p> 					
Fundamental values	<p>High Expectations</p> 	<p>Perseverance</p> 	<p>Enjoyment</p> 	<p>Respect</p> 	<p>Trust</p> 	<p>Responsibility</p> 			
Big ideas	A	N	K	E	R	M	O	O	R
	Adventure	Nature	Knowledge	Enterprise	Relationships	Movement	Observe Critically (evaluating)	Observe Thoughtfully (empathising)	Respect
									



Curriculum Intent



Builds on our fundamental values of 'High Expectations, Perseverance, Enjoyment, Respect, Trust and Responsibility'.

Promotes a life-long love of learning.

Enables children to offer opinions and reason articulately, whilst also being able to debate and disagree respectfully.

Raises aspirations and open's their eyes to a world beyond their immediate surroundings.

Promotes practical everyday life skills that prepares our children for the future.

Enables children to become active learners who are positively engaged in the acquisition of skills and knowledge.

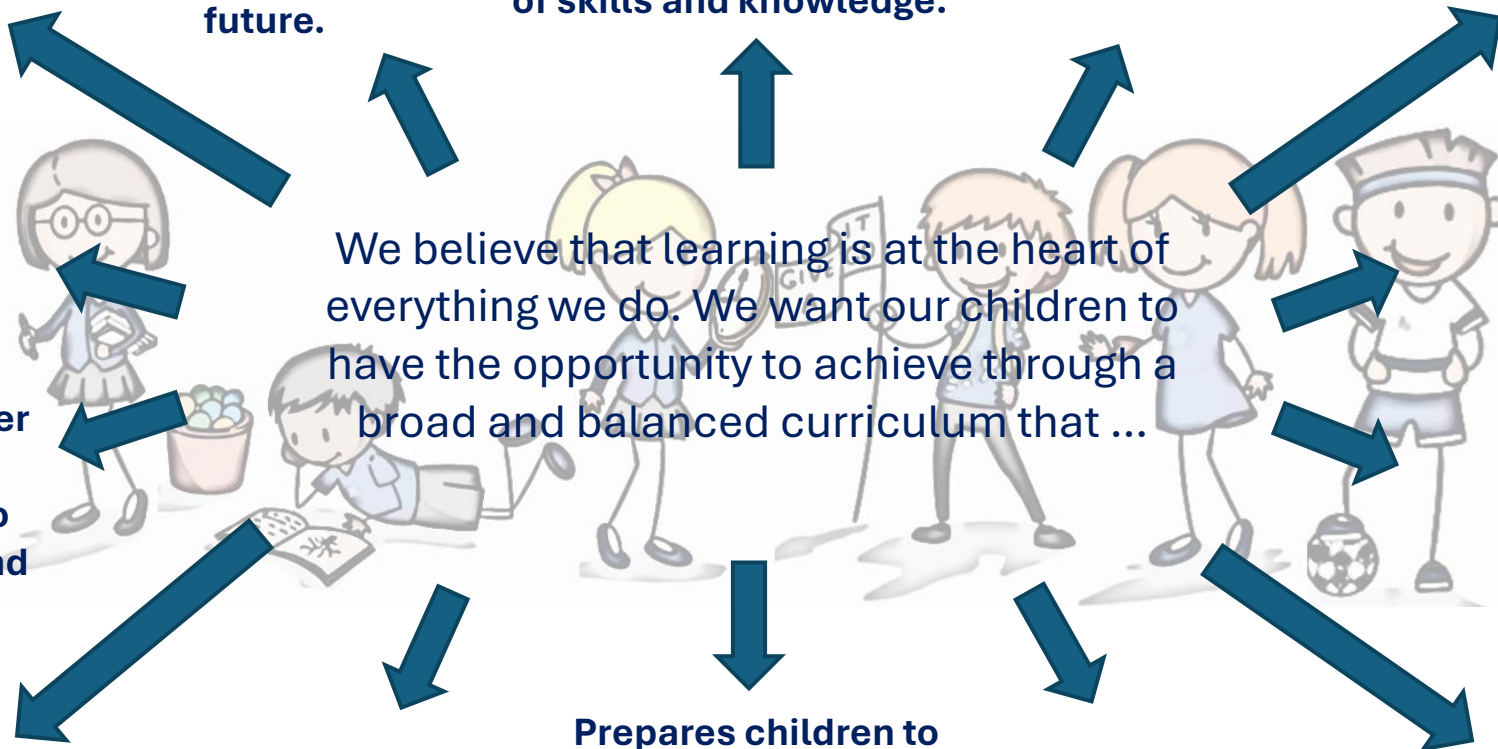
Promotes creativity, curiosity, and confidence.

Allows children to be able to reflect on their learning and to improve their own work.

Secures knowledge and skills across all EYFS and National Curriculum subjects that build upon prior knowledge.

Builds character, resilience, self-motivation, and a will to succeed.

To provide opportunities for our children to learn in different ways and to have a wide variety of learning experiences.



We believe that learning is at the heart of everything we do. We want our children to have the opportunity to achieve through a broad and balanced curriculum that ...

Develops a hunger for knowledge and to have the resilience necessary to tackle challenges and problems.






Prepares children to take risks and learn from their mistakes.

To enable children to develop as independent learners as well as being able to work collaboratively.

Subject Specific Sequencing and Key Concepts: Each subject has been planned to ensure that knowledge and skills are sequenced from Early Years to Year 6. Key Concepts are the subject specific ‘*Golden Threads*’ that children will learn about, return to and revisit as they progress through our school. Our pupils will have opportunities to link new learning to prior knowledge thus building a rich and deep knowledge of these ‘*Golden Threads*’ with each encounter. (See *Design and Technology long term plan with key concepts*)







Big Ideas:

These are the overarching ‘*Anker Moor*’ concepts that pupils can use and apply across different curriculum subjects. For example, in all areas of the curriculum, children will build an understanding of ‘Observing Critically’; making observation in Science, identifying main ideas within a text in English, observing and critiquing artwork, analysing data sets in maths, evaluating historical sources, observing local ecosystems within Geography, self reflection and critical thinking in PSHE.









A	N	K	E	R	M	O	O	R
								

Character Virtues:

These are the underpinning qualities and character traits that we desire all of our children, and staff, to demonstrate.

High Expectations 	Perseverance 	Enjoyment 	Respect 	Trust 	Responsibility 
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IMPLEMENTATION – Our approach

A	N	K	E	R	M	O	O	R
								

At Ankermoor Primary Academy, we believe that design and technology should be taught in all year groups to prepare children to be independent, work in teams and become creative problem-solvers. We use the Plan Bee scheme of work to teach design and technology during specific weeks, three times a year, linked to the national curriculum objectives for that year group.

Children at Ankermoor are encouraged to be creative whilst designing products with a purpose for the correct audience. We have sequenced the Design and Technology curriculum carefully, ensuring that each lesson builds upon the previous one and scaffolds learners' knowledge and skills progressively. We have created opportunities for learners to explore different media, techniques, and styles whilst exploring different strands including textiles, printing and mechanisms. Furthermore, our pupils will learn about influential and diverse designers who have impacted our creative world. We have also embedded opportunities for pupils to critique their work constructively and receive feedback from their peers and teachers.

IMPLEMENTATION – Our approach

Our curriculum coverage in Design and Technology at Ankermoor Primary Academy:

- Provides a structured process from research, design, make and evaluation
- Covers a variety of Design and Technology areas and age-related expectations both in line with our skills progression document and the National Curriculum
- Provides children with a broad and rich coverage of the Design and Technology subject
- Equips children with life skills

Design and Technology learning will focus on areas of cooking and nutrition, technical skills, and textiles which will be rotated throughout year between key stages (KS1/KS2)

During lessons, our children will:

- Learn about the unit focus
 - Research the focus and conduct surveys;
 - Experiment with and refine designs accordingly
 - Create
 - Evaluate
- Continuing Professional Development supports the knowledge and confidence of our teaching staff and is presented in the form of Professional Development/Coaching

Staff at Ankermoor Primary Academy create a positive attitude towards Design and Technology learning both inside and outside the classrooms and promote the expectation that all children can achieve highly through adaptive teaching. Recall, repetition, modelling and practice are key facilitators used to support all children in their learning. Key vocabulary is an integral part of each unit of work, enabling children to have a greater understanding of important key concepts, '*Golden Threads*', thus enabling them to communicate design information.



EYFS Development Matters 2020: Expressive Arts and Design

Explore, use and refine a variety of artistic effects to express their ideas and feelings. • Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills.

Key Stage National Curriculum Expectations: Design and Technology

Key stage 1:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]

• select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Evaluate

- explore and evaluate a range of existing products
 - evaluate their ideas and products against design criteria
- #### Technical knowledge
- build structures, exploring how they can be made stronger, stiffer and more stable
 - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Key stage 2:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
 - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
 - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
 - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
 - investigate and analyse a range of existing products
 - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
 - understand how key events and individuals in design and technology have helped shape the world
- #### Technical knowledge
- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
 - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
 - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
 - apply their understanding of computing to program, monitor and control their products

Key stage 1 and 2:

Cooking and nutrition As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

Key Stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Key Stage 2

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.

IMPACT– Our approach

At Ankermoor Primary Academy, we are determined that teaching and learning in all subjects is driven by our curriculum intent. Therefore, we monitor the impact of learning in each lesson through teacher observations, discussions, low-stake quizzes and work produced which is evidenced in children's books, displays.

Impact is also measured at the end of a unit of work through:

- the use of subject specific Assessment One Notes
- Internal and external picture building

