

Aston Rowant C†E Primary School

WHAT DT LOOKS LIKE AT ASTON ROWANT

Growing together, rooted in God, having fullness of life.

Colossians 2:1-7



Vision: Aston Rowant community will be courageous life-long learners, who are rooted in God, living our Christian values and enjoying life in all its fullness.

Mission: Growing together and inspiring one another through our Christian values and a broad enriched curriculum.

G	GRATITUDE
R	RESILIENCE
O	OUTREACH
W	WONDER
T	TRUST
H	HARMONY

Grateful Our attitude to learning shows that we appreciate the breadth of opportunities that we have to learn inside and outside of the classroom with our resources and surroundings.

Resilient We cultivate a growth mindset from the perspective of building courage, encourage failure by modelling it and showing how to reframe events in a positive light, so children are willing to try new things whilst embracing failure and the opportunities it brings. Let the children learn to have control over their own actions, including trying again if they don't succeed.

Outreach Children will leave Aston Rowant C†E Primary School with an enthusiasm and thirst for learning that continues for the next stage of education and enables the children to live life to its fullness.

Wonder We generate curiosity and wonder about what we teach and allow it to take hold into something that becomes a passion for lifelong learning for all of our children. We openly involve them in their learning by meeting them where they are and then showing them where they can go exploring their interests, expanding upon their ideas, and engaging them in meaningful dialogue which encourages them to fully engage with owning and developing their own learning.

Trust We will develop our children into independent learners to empower them to take control of their own learning – both inside the classroom. Teachers trust that our pedagogical approach cultivates independent habits of mind in the children we teach and the children themselves trust their foundation and values to explore the truths of the world for themselves.

Harmonious The whole school team will grow together, sharing our knowledge, understanding and experience. We will question, encourage and support one another on our learning journey.

RATIONALE

DT – Curriculum Overview

Design and Technology at Aston Rowant is a practical, purposeful subject that enables pupils to apply creativity, knowledge and skills to real-life problems. The curriculum is designed to be ambitious, inclusive and carefully sequenced, ensuring pupils develop technical understanding alongside problem-solving and critical thinking. Through engaging lessons and hands-on projects, pupils learn how products are designed, made and evaluated, gaining insight into the designed and manufactured world. Design and Technology plays a vital role in preparing pupils for future learning by fostering independence, resilience, collaboration and an understanding of how innovation can improve lives.

Design & Technology – Intent

The intent of the Design and Technology curriculum at Aston Rowant is to ensure that all pupils develop the creative, technical and practical expertise needed to design and make products that solve real and relevant problems.

Our curriculum is designed to:

- Develop pupils' ability to design, make and evaluate purposeful products
- Teach pupils to work with a range of materials, tools and techniques
- Build understanding of structures, mechanisms, textiles, electrical systems and food technology
- Encourage pupils to think critically, solve problems and refine ideas
- Promote awareness of users, purpose and sustainability

Design and Technology supports pupils' wider development by encouraging curiosity, resilience and responsibility, while preparing them with transferable skills for future learning and life.

Design & Technology – Implementation

Design and Technology is taught through carefully planned units that follow the design–make–evaluate process. Learning is progressive, ensuring pupils revisit and build on prior knowledge and skills.

Across the school, pupils:

- Design and construct structures, such as frameworks and bridges, using appropriate joins
- Explore mechanisms, including levers, sliders, wheels and axles
- Develop textile skills, such as joining fabrics using simple stitching techniques
- Learn food technology, including preparing healthy dishes, following recipes and understanding nutrition
- Apply technical knowledge, selecting tools and materials safely and accurately

Lessons are practical and engaging, with clear modelling, opportunities for experimentation and time for reflection and improvement. Pupils often work collaboratively, sharing ideas and evaluating outcomes together. Teachers ensure learning is inclusive, with scaffolding and challenge provided to enable all pupils to succeed.

Design & Technology – Impact

As a result of the Design and Technology curriculum at Aston Rowant, pupils:

- Develop secure practical skills and confidence in using tools and materials
- Show creativity and independence when designing and making products
- Demonstrate resilience by adapting designs and learning from mistakes
- Understand how products are designed for specific users and purposes
- Communicate ideas clearly through plans, models and evaluation

Pupils leave Aston Rowant with a strong foundation in design thinking, practical problem-solving and teamwork. Design and Technology makes a significant contribution to pupils' personal development, equipping them with the skills, confidence and mindset needed to engage positively with an ever-changing world.

GRATITUDE

Design and Technology at our school fosters Gratitude by helping pupils appreciate how everyday products are thoughtfully designed, made and improved. Through practical experiences, pupils gain a clear understanding of the skill, creativity and problem-solving required to create products that meet real and relevant needs.

Pupils explore a wide range of materials, tools and processes, including working with paper, card, wood, textiles and food. They learn to value the opportunities they are given to design, make and evaluate their own products, recognising the accuracy, care and effort required to achieve successful outcomes.

By studying existing products, designers and inventors, pupils develop an appreciation of how purposeful design can improve quality of life. They begin to understand the impact of design in the wider world and the importance of thoughtful, user-focused solutions.

Pupils demonstrate gratitude through pride in their work, respect for materials and tools, and a positive attitude towards the design process. They recognise that learning through making is a valuable and meaningful experience.

As a result, pupils develop an appreciation for creativity, craftsmanship and innovation, alongside a growing respect for the designed world around them. Design and Technology makes a strong contribution to pupils' personal development by fostering thankfulness for both practical skills and the opportunities to create.

"I like making things because you can see how much effort it takes to get it right." Elsie Year 3



RESILIENCE

Design and Technology develops **Resilience** by requiring pupils to persevere through the full design process. Pupils learn that designing and making involves problem-solving, adapting ideas and learning from mistakes, and that successful outcomes are often achieved through refinement rather than first attempts.

Pupils engage in the complete design–make–evaluate cycle, creating products such as moving vehicles using axles and wheels, structures using frames and joins, textiles through stitching techniques and food products by following recipes and applying techniques. When outcomes do not go as planned, pupils are encouraged to review, adapt and improve their designs, developing a positive approach to challenge.

DT lessons require sustained focus, precision and determination, particularly when measuring, cutting, joining and assembling components. Pupils learn to work accurately, test ideas and respond to feedback in order to improve the functionality and quality of their products.

Over time, pupils develop confidence in managing challenges independently, recognising that setbacks are a valuable part of the learning process.

As a result, pupils become determined and reflective learners who persevere when faced with difficulty. Design and Technology makes a significant contribution to pupils' personal development by building resilience, independence and confident problem-solving skills.

“If it doesn't work, you just change your design and try again until it does.” Arthur Year 2

OUTREACH

Design and Technology supports **Outreach** by helping pupils understand how design responds to real-world needs and challenges. Pupils learn that products are created not in isolation but to solve problems for individuals, communities and wider society.

Pupils design with a clear purpose and user in mind, considering who a product is for, how it will be used and how effectively it meets its intended goal. This may include designing shelters, containers, mechanisms or healthy food products. Through this process, pupils develop an understanding of how thoughtful design can improve people's lives.

DT also encourages pupils to consider sustainability, materials and responsible choices, exploring how design decisions can impact the environment and future generations. Pupils begin to recognise the importance of creating solutions that are both functional and ethical.

Through evaluating existing products and their effectiveness, pupils make connections between their learning and the wider world, understanding how innovation and creativity contribute to society.

As a result, pupils develop a strong sense of responsibility, purpose and global awareness. They recognise that design can be used to make a positive difference and begin to see themselves as individuals who can contribute meaningfully to the world around them. Design and Technology supports pupils' personal development by encouraging engagement with real-life issues and purposeful, outward-looking creativity.

"We design things to help people, not just to make them look good." Sam Year 4



WONDER

Design and Technology nurtures **Wonder** by sparking curiosity about how things work and how ideas can be transformed into real, functional products. Pupils are encouraged to ask questions, explore mechanisms and investigate a wide range of materials and components.

DT lessons are engaging and highly practical, allowing pupils to explore structures, mechanisms, electrical systems, textiles and food technology. Pupils investigate concepts such as levers, sliders, wheels and axles, and simple circuits, developing a fascination with movement, function and design.

Through hands-on exploration, pupils experience excitement when prototypes begin to work, curiosity when testing and refining designs, and enthusiasm for experimenting with new materials and techniques. They are encouraged to think deeply about how everyday products are made and how design influences the world around them.

Teachers create opportunities for pupils to explore, question and discover, ensuring that curiosity drives learning. Pupils begin to understand that innovation comes from asking questions and seeking solutions.

As a result, pupils develop curiosity, creativity and a genuine enthusiasm for design and innovation. Design and Technology supports pupils' personal development by fostering wonder, enquiry and inventive thinking, preparing them to think creatively about the world around them.

"I like finding out how things work and then trying to make my own version." Alfie Year 5

TRUST

Design and Technology supports the value of **Trust** by encouraging pupils to have confidence in their ideas, decisions and practical skills. Pupils are supported to make informed choices about materials, tools and construction methods, and to take responsibility for their work throughout the design process.

Teachers create a safe and supportive environment where pupils feel confident to use tools appropriately and learn through trial and refinement. Pupils are encouraged to trust the design process, understanding that evaluation and improvement are essential steps in creating successful outcomes. They learn to reflect honestly on what has worked well and what could be improved.

Pupils also develop trust when working collaboratively, sharing tools, ideas and responsibilities during group tasks. They learn to respect others' contributions and recognise that trust and cooperation are key to successful teamwork.

Over time, pupils build confidence in their own abilities and judgement, becoming increasingly independent in their approach to designing and making.

As a result, pupils become self-assured, reflective and responsible learners. Design and Technology supports pupils' personal development by fostering self-belief, responsibility and trust in both themselves and others.

"You have to trust your ideas and go for it, even if you're not sure it will work at first." Douglas Year 6

HARMONY

Design and Technology promotes **Harmony** through collaboration, teamwork and shared problem-solving. Pupils regularly work together to plan, design, make and evaluate products, learning to listen carefully, compromise and respect different ideas.

Collaborative projects - such as designing and constructing structures or creating food products - encourage pupils to share roles and work towards common goals. Through these experiences, pupils develop an understanding that successful outcomes often depend on cooperation, clear communication and collective effort.

DT lessons also promote the use of constructive feedback, enabling pupils to improve their designs while maintaining positive and respectful relationships. Pupils learn to value differing perspectives and recognise that combining ideas can lead to stronger and more effective solutions.

Teachers explicitly model and support the behaviours needed to work harmoniously, helping pupils to develop skills in communication, teamwork and mutual respect.

As a result, pupils demonstrate effective collaboration, respect for others and a strong sense of shared achievement. Design and Technology makes a significant contribution to pupils' personal development by fostering harmony, cooperation and the ability to work successfully with others.

“When we work together, we get better ideas and help each other make it work.” Grace Year 5