Curriculum Statement for Design Technology

Design Technology is all about creativity, curiosity, and problem-solving—equipping children with practical skills and big ideas for the real world.

At Red Oaks, we believe that Design Technology is a practical and inspiring subject that equips children with essential skills and knowledge they can build upon throughout their lives in an ever-changing world. Our curriculum encourages creativity, innovation, and resilience, while helping children understand the relevance of design and technology in everyday life.

Intent

Our Design Technology curriculum aims to:

- Provide children with opportunities to explore and understand how products are designed, made, and used.
- Introduce pupils to famous faces and careers within design, technology, and food.
- Encourage children to investigate products from the past and present, learning how they work and how they can be improved.
- Develop problem-solving skills, resilience, and the ability to work collaboratively and respectfully with others.
- Ensure children leave Red Oaks with the ability to prepare simple, healthy meals safely, using their understanding of ingredients, hygiene, and availability.

We want our pupils to be methodical, enterprising, and confident in applying their skills in a supportive and safe environment.

Implementation

Each year, children take part in a range of Design Technology projects, where they are supported to learn and apply skills in designing, making, testing, and evaluating products using a design brief. Our curriculum is carefully structured to ensure that skills and knowledge are built upon progressively.

Children explore existing products, critically evaluating their own work and that of others. They are taught using a variety of teaching styles that embrace different learning preferences, and they have opportunities to work both independently and collaboratively.

Throughout their time at Red Oaks, children:

- Use a wide range of materials and resources, including ICT.
- Learn to risk assess and use tools safely with increasing confidence.
- Are supported and challenged to develop their own learning.
- Listen to and respond respectfully to the ideas of others.

Design Technology is further enriched through whole-school events such as our **annual STEM Fayre** and **DT-themed Family Learning events**, which are always very popular and well-attended.

Impact

Through their experience of Design Technology at Red Oaks, children:

- Develop practical skills and technical knowledge that prepare them for future learning and life.
- Learn to solve problems creatively and demonstrate resilience.
- Work collaboratively, making constructive suggestions for design improvements.
- Gain confidence in using tools and materials safely and effectively.
- Understand the importance of healthy eating and food preparation.

Our curriculum ensures that children leave Red Oaks with a strong foundation in design thinking, creativity, and practical skills—ready to take on new challenges and opportunities in the wider world.

	Autumn 1	***Autumn 2***	***Spring 1***	***Spring 2***	***Summer 1***	***Summer 2***
Year 1	Mechanisms: levers and sliders		Cooking: Prepare and serve a simple dish			Textiles: Templates and joining techniques-
Year 2	Cooking: healthy balanced snack/ meal		Structures: Freestanding Structures		Mechanisms: Wheels and axle	
Year 3	Mechanisms- levers/ pneumatics- warning system		Structures: shell structure		Cooking: Prepare and cook a simple nutritional dish	
Year 4		Cooking: Healthy and varied diet	Moving mechanisms- Levers and Linkages		Electrical systems: biome- electrical circuit including buzzer/ lamp/ switch	
Year 5		Mechanisms: gears and pulleys- Space craft gear and pulley system		Cooking: Celebrating seasonality		Structures: Frame structures- Air raid Shelter
Year 6	Electrical systems: Buzzer game			Textile: Combining different fabric shapes		Cooking: Celebrating Culture- foods celebrating our multicultural society

Useful links

Useful recipe ideas: https://www.foodafactoflife.org.uk/recipes/
Ideas for Design Technology things to do at home:
The Institute of Engineering and Technology: https://education.theiet.org/key-stage-1-2-3-and-4-free-stem-resources/home-learning-resources-key-stage-1-and-2/
Engineering at home: https://www.smallpeicetrust.org.uk/challenge-yourself-at-home/