

DESIGN AND TECHNOLOGY INTENT

Our design and technology curriculum equips pupils with the knowledge and skills to **solve real-life, practical problems and to live a healthy lifestyle. We encourage innovation and risk-taking** whilst pupils consider their own and others' needs, wants and values. Through the evaluation of past and present design and technology, pupils take inspiration to create or refine new products.

Pupils draw upon a broad range of knowledge from other areas of the curriculum, such as mathematics, science, computing and art. Through the curriculum content and the influential engineers, designers, chefs and architects pupils learn about, they become resourceful and capable citizens and may develop aspirations for **future careers**.

Pupils learn how to create products for a wide range of contexts and users. Pupils know that effective designers test, evaluate and modify their ideas at different points of the design process. They understand that aspects of the project that do not meet the design brief and need further modification are a valuable way of achieving a successful outcome. They critique their finished product and offer constructive feedback to others.

Over time, pupils understand drawing as essential to effective design. Pupils use their sketchbooks to record, annotate and amend product designs.

Pupils develop:

- **'practical knowledge'**, which is about developing technical proficiency in food and nutrition, textiles, construction, mechanical components, electrical components, computer aided design and modelling (CAD and CAM)
- **'substantive knowledge'**, which is the content that pupils learn about influential people in the world of design and technology
- **'disciplinary knowledge'**, which is what pupils learn about how design is studied, discussed and judged.

The content in the design and technology curriculum is:

- Food and Nutrition
- Construction
- Electrical components
- Mechanical components
- Textiles
- Subject specific technical vocabulary

Overall Reading Enhanced Curriculum Intent

Our reading-enhanced curriculum excites pupils to ask questions and learn new knowledge and skills. Our curriculum builds **pupils' substantive and disciplinary knowledge progressively over time**, from the moment they start school in the Early Years. It prepares them well for the Key Stage Three curriculum.

The reading-enhanced curriculum has **reading for purpose built into all learning**. Units of work have a high-quality, age-appropriate driving text assigned that is used as the catalyst to impart curriculum

knowledge and promote questioning. These texts are carefully selected to engage, inspire and deepen understanding. Alongside this, supplementary texts and bespoke knowledge organisers enable pupils to enrich their knowledge, subject-specific vocabulary and curriculum skills. **Every curriculum session includes reading for purpose**, from either the driving book or a supplementary text. Pupils then use this as a stimulus to discuss new knowledge, deepen their enquiry skills and form links in their learning.

The long-term plan is devised so that there are clear subject links within a unit, enabling pupils to make **connections in their learning**. This is also the case with the subject strands, where skills correlate with other subjects. For example, the skills within similarities and differences in history work parallel with making comparisons in geography.

Pupils learn subject content in the reading-enhanced curriculum prior to accessing the reading strategy texts. For example, in the Year 5 Democracy unit, pupils learn about the Gunpowder Plot. This prepares them with background knowledge for reading *Black Powder* in Year 6. This ensures that pupils have a further opportunity to demonstrate knowledge in a different context, build schema and reinforce retention of knowledge.

Pupils master knowledge progressively through each year, phase and key stage. The needs of all pupils have been carefully considered when setting this ambition. This ambition remains high but **may be adapted by support and resources, for example, for those pupils with SEND.**

The **most important knowledge we expect pupils to remember is identified as take-aways** in each subject. Reinforcing our strong belief in fostering enquiry, all units have an **overarching Big Question** as its title and each session has a **threaded Big Question**: all of which are used to assess pupil progress.

Influential people are also paramount to the curriculum and are used in all subjects. These are selected to span different eras and link directly to the unit of work pupils are learning. By incorporating a diverse range of people (e.g., historians, scientists, entrepreneurs), new learning is put into a real-world context, developments within a subject historically are seen and pupils are given an insight into how their learning impacts on the world around them and **inspires them to pursue future careers.**

Throughout the REC curriculum, we take every opportunity possible to **promote pupils' spiritual, moral, social and cultural development.**