



To Care

# Design Technology EDUCATION AT PICKERING COMMUNITY JUNIOR SCHOOL



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## INTENT:

At Pickering Junior School, we want our children to use originality and imagination to design, make and evaluate products that solve real and relevant problems, within a variety of contexts, which are taught progressively through practical and inspiring lessons. We want our pupils to carefully consider the needs of the user and make alterations to their designs, as appropriate, to make purposeful products. We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum and we aim to develop pupil's confidence to take risks, through drafting designs, modelling, and testing and to be reflective learners who evaluate their work and the work of others.

## IMPLEMENTATION:

### Skills

Construction Materials  
Strengthen, stiffen and reinforce more complex structures  
Sewing and Textiles  
Food Technology- Cooking and Nutrition  
Electrical Systems  
Mechanical Systems  
Computer Programming

### Knowledge and Understanding

#### Design

- Research to inform the design
- Make design innovative, functional, and appealing
- Fit for purpose
- Aimed at a particular audience
- Use discussion
- Annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

#### Make- Practical Skills

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)
- select from and use a wider range of materials and components, according to their functional properties and aesthetic qualities

#### Evaluate

- Investigate and analyse a range of existing products
- evaluate their ideas and products against 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

**IMPACT:** Pupils become engaged, curious, and confident in design and technology. They develop the skills to follow the design process (design, make, evaluate), articulate their thinking, use tools and materials safely and effectively, and apply their learning to other subjects. They are able to take risks and adapt designs, as appropriate. By the end of KS2, pupils have the technical knowledge and a love for DT to prepare them for secondary education and their future lives.



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# DESIGN TECHNOLOGY EDUCATION PEDAGOGY ON A PAGE



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## Design Technology Supporting Aspects

### Cultural Capital

- Children are encouraged to design products based on set criteria, which enhances their problem-solving and critical thinking abilities
- Lessons incorporate examples of inventions from different time periods and diverse inventors to build a knowledge base on creativity and achievement

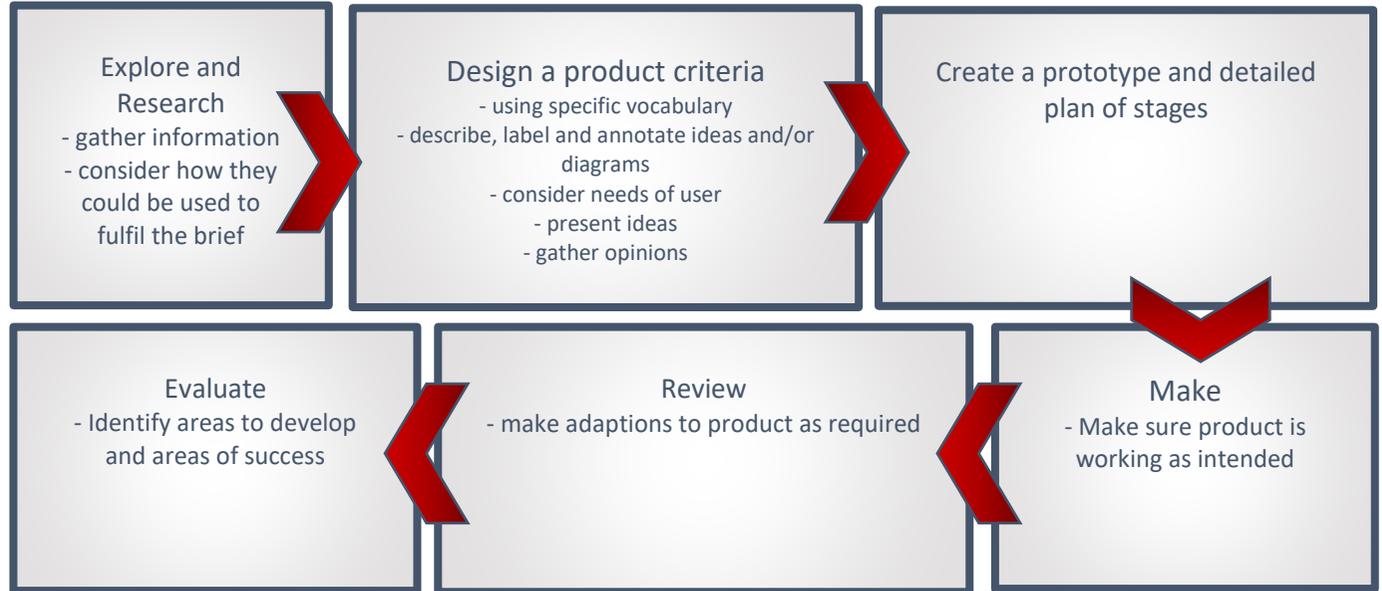
### School/British values and SMSC

- All themes are taught asking the children to carefully consider the intended user, purpose and outcome for their designed product to ensure that person's individual needs are being met
- Safety rules for equipment are understood and articulated
- promote giving helpful feedback
- Children make their own choices and take risks in all DT lessons

### Learning outside the classroom

- Cookery lessons (3 a year)
- Forest Schools
- Residential with DT links
- Microbits

## Design Technology Lesson structure and pedagogy (to be selected from)



## Core Principles to support the Design Technology Pedagogy

- Health and Safety is at the core of all Design Technology lessons. CLEAPPS is used for guidance and advise as required. Staff model and give safety briefings
- Real life concepts are discussed with the children to understand the uses and implications of Design Technology, today and for the future
- Children make a product thinking about the WHAT, the WHO and the WHY
- Connections are made to new learning, building on children's existing understanding
- Children are encouraged to take risks to design, make and evaluate products which are fit for purpose
- Lessons focus on the process and not the end result