

The Sonar Designer

Develop the creative, technical and practical expertise to design, make and evaluate products in a range of contexts

Sonar Curriculum

Make

- Select from and use a wide range of materials eg construction, textiles and ingredients
- Select from and use a wide range of tools and equipment to cut, shape, join and finish
- Use a wider range of tools, equipment, materials and components
- Place greater emphasis on accuracy and aesthetics

Technical Knowledge

- Build structures, exploring how they could be made stronger, stiffer and more stable
- Explore and use mechanisms: levers, wheels and axles
- Apply understanding of how to strengthen, stiffen and reinforce structures
- Understand and use mechanical systems: gears, pulleys, cams, levers and linkages
- Understand and use electrical systems: series circuits, switches, bulbs and motors
- Apply understanding of computing to program, monitor and control products

Evaluate

- Explore and evaluate a range of existing products
- Evaluate own ideas and designs against design criteria

As Key Stage 1 plus:

- Consider views of others to improve work
- Understand how key events and individuals in D&T helped shape the world

Design

- Design products that are purposeful, functional and appealing
- Generate, develop, model and communicate ideas through talking, drawing, templates and ICT

As Key Stage 1 plus:

- Communicate and annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and CAD
- Use research to inform design

Teacher Guidance Range of contexts across both Key Stages to include

- Home
- School
- Gardens
- Playground
- Local community

Many opportunities for inter-curricular links

Science: Healthy Living

Computing: Coding

Maths: Directional language

English: Instructional writing

History: Comparing products over time

Food technology should also be addressed across both key stages

KS1

- Use basic principles of healthy and varied diet to prepare dishes
- Understand where food comes from

KS2

- Understand and apply 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 how ingredients are grown, reared, caught and processed



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