

DT Progression Map

DT PROGRESSION MAP

YEAR 6

- I can use research I have done into famous designers and inventors to inform my designs
- I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design
- I can apply my knowledge of materials and techniques to refine and rework my product to improve its functional properties and aesthetic qualities
- I can use my knowledge of famous designs to further explain the effectiveness of existing products and products I have made

YEAR 5

- I can use my research into existing products and my market research to inform the design of my own innovative product
- I can create prototypes to show my ideas
- I can produce step by step plans to guide my making, demonstrating that I can apply my knowledge of different materials, tools and techniques
- I can make detailed evaluations about existing products and my own considering the views of others to improve my work

YEAR 1

- I can create a simple design for my product
- I can use pictures and words to describe what I want to do
- I can select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing
- I can ask simple questions about existing products and those that I have made

Research, Design, Make, Evaluate Processes

Progression Map

YEAR 4

- I can use my knowledge of existing products to design a functional and appealing product for a particular purpose and audience
- I can create designs using exploded diagrams
- I can use my knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them
- I can consider how existing products and my own finished products might be improved and how well they meet the needs of the intended user

YEAR 2

- I can design useful, pleasing products for myself and other users based on a design brief
- I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and IT
- I can evaluate and assess existing products and those that I have made using a design criteria

YEAR 3

- I can use my knowledge of existing products to design my own functional product
- I can create designs using annotated sketches, crosssectional diagrams and simple computer programmes
- I can investigate and analyse existing products and those I have made, considering a wide range of factors



Vocabulary

function, innovative, design specification, design brief, user, purpose, design criteria, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, Prototype, Annotate, Develop, Refine and alter, review, modify, reflect, change, strengths, weaknesses, modify

DT PROGRESSION MAP

YEAR 6

- I can use my technical knowledge and accurate skills to problem solve during the making process
- I can use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately
- I can apply my understanding of computing to program, monitor and control my products

YEAR 5

- I can make careful and precise measurements so that joins, holes and openings are in exactly the right place
- I can build more complex 3D structures and apply my knowledge of strengthening techniques to make them stronger or more stable
- I can understand how to use more complex mechanical and electrical systems

YEAR 1

- I can use a range of simple tools to cut, join and combine materials and components safely
- I can build structures, exploring how they can be made stronger, stiffer and more stable
- I can use wheels and axles in a product

Technical Skills

Progression Map

YEAR 4

- I can use techniques which require more accuracy to cut, shape, join and finish my work e.g. Cutting internal shapes, slots
- I can apply techniques I have learnt to strengthen structures and explore my own ideas
- I can understand and use electrical systems in my products

YEAR 2

- I can choose tools I would like to use and select materials based on my knowledge of their properties
- I can safely measure, mark out, cut and shape materials and components using a range of tools
- I can investigate different techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable
- I can explore and use mechanisms such as levers, sliders, wheels and axles in products

YEAR 3

- I can safely measure, mark out, cut, assemble and join with some accuracy
- I can make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them
- I can strengthen frames with diagonal struts
- I can understand how mechanical systems such as levers and linkages or pneumatic systems create movement



Vocabulary

tools equipment materials components function mechanical electrical construction pulley finishing polishing sequins painting smoothing assemble stages of making measure mark out cutting shaping perimeter slots cut-outs mechanism levers winding varnishing sanding

DT PROGRESSION MAP

YEAR 6

- Confidently plan a series of healthy meals based on the principles of a healthy and varied diet
- Use information on food labels to inform choices
- Research, plan and prepare and cook a savoury dish, applying his/her knowledge of ingredients and his/her technical skills

YEAR 5

- Understand the main food groups and the different nutrients that are important for health
- Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat
- Select appropriate ingredients and use a wide range of techniques to combine them

YEAR 1

- Talk about what he/she eats at home and begin to discuss what healthy foods are
- Say where some food comes from and give examples of food that is grown
- Use simple tools with help to prepare food safely

Food and Nutrition

Progression Map

YEAR 4

- Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active
- Understand seasonality and the advantages of eating seasonal and locally produced food
- Read and follow recipes which involve several processes, skills and techniques

YEAR 2

- Understand the need for a variety of food in a diet
- Understand that all food has to be farmed, grown or caught
- Use a wider range of cookery techniques to prepare food safely

YEAR 3

- Talk about the different food groups and name food from each group
- Understand that food has to be grown, farmed or caught in Europe and the wider world
- Use a wider variety of ingredients and techniques to prepare and combine ingredients safely



Vocabulary

processed peel chop slice grate mix fresh spread knead bake healthy diet varied organic savoury sweet recipe appearance peeling chopping grating mixing spreading kneading baking prepare temperature taste texture hygiene safety measure gram kilogram heat/hot oven hob cook utensils grown reared caught fishing seasonal ingredients