

DESIGN AND TECHNOLOGY

KEY STAGE 1

DESIGN

Pupils should be taught to:

- ❖ design purposeful, functional, appealing products for themselves and other users based on design criteria
- ❖ generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

MAKE

Pupils should be taught to:

- ❖ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- ❖ select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

EVALUATE

Pupils should be taught to:

- ❖ explore and evaluate a range of existing products
- ❖ evaluate their ideas and products against design criteria.

TECHNICAL KNOWLEDGE

Pupils should be taught to:

- ❖ build structures, exploring how they can be made stronger, stiffer and more stable
- ❖ explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

TECHNICAL KNOWLEDGE

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- ❖ build structures, exploring how they can be made stronger, stiffer and more stable
- ❖ explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

COOKING AND NUTRITION

Pupils should be taught to:

- ❖ use the basic principles of a healthy and varied diet to prepare dishes
- ❖ understand where food comes from.

KEY STAGE 2

DESIGN

Pupils should be taught to:

- ❖ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- ❖ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

MAKE

Pupils should be taught to:

- ❖ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- ❖ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

EVALUATE

Pupils should be taught to:

- ❖ investigate and analyse a range of existing products
- ❖ evaluate their ideas and products against their own 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.

TECHNICAL KNOWLEDGE

Pupils should be taught to:

- ❖ apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- ❖ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- ❖ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- ❖ apply their understanding of computing to program, monitor and control their products.

COOKING AND NUTRITION

Pupils should be taught to:

- ❖ understand and apply the 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 know where and how a variety of ingredients are grown, reared, caught and processed.