Lower Key Stage 2

Designing (Understanding contexts, users and purposes, generating, developing, modelling, communicating ideas)	Making (Planning, practical skills and techniques)	Evaluating (Own ideas and products, existing products, key events and individuals)	Technical Knowledge (Making products work)	Cooking and Nutrition (Where food comes from, food preparation, cooking and nutrition)
*Work confidently within a range of contexts *Describe the purpose of the product and how it will work *Gather information and develop the design criteria *Generate realistic ideas focusing on the needs of the user *Use IT to develop and communicate ideas	*Select tools and equipment suitable and explain choice and skills to be used *Order the main stages of production *Follow safety and hygiene rules *Measure, mark, cut, assemble, join and combine materials with more accuracy *Using finishing techniques including art skills	*Identify strengths/areas for improvement in own work *Refer to design criteria during build *Reflect on product using the design *Can products be recycled or reused? *Learn about a designer, engineer or manufacturer	*Input, process and output *How maths and science knowledge is used in D&T *Mechanical systems; levers, linkages, pneumatic systems to create movement *Simple electrical circuits *Program a computer to control output *Create strong, stiff shell structures	*Understand food is grown, reared and caught (locally and worldwide) *Use a range of techniques; chopping, slicing, spreading, mixing, kneading *Know about a healthy balanced diet *What is needed to provide energy and the importance of being active and healthy

Notes and guidance

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aims

The national curriculum aims to ensure that all pupils:

- develop creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.