| Year | Skill Progression |
| :---: | :--- |
| Reception | Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <br> Use what they have learned about materials in original ways, thinking about uses and purposes. <br> Represent their own ideas, thoughts and feelings through design and technology. ELG |
|  | DESIGN <br> design purposeful, functional, appealing products for themselves and other users based on design criteria <br> generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and <br> communication technology <br> MAKE <br> select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing <br> select from and use a range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <br> EVALUATE <br> explore and evaluate a range of existing products <br> evaluate their ideas and products against design criteria <br> TECHNICAL KNOWLEDGE <br> build structures, exploring how they can be made stronger, stiffer and more stable <br> explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. <br> COOKING AND NUTRITION <br> use the basic principles of a healthy and varied diet to prepare dishes |
| LKs2 | DESIGN <br> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular <br> individuals or groups <br> Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern <br> pieces and computer-aided design <br> MAKE <br> select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately <br> select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional <br> properties and aesthetic qualities <br> EVALUATE <br> investigate and analyse a range of existing products <br> evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <br> understand how key events and individuals in design and technology have helped shape the world Technical knowledge <br> apply their understanding of how to strengthen, stiffen and reinforce more complex structures <br> understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] <br> understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] <br> apply their understanding of computing to program, monitor and control their products. |

## COOKING AND NUTRITION

Select from a range of ingredients according to their functional properties and aesthetic qualities
Generate, develop and communicate ideas through discussion
Evaluate own ideas and products against the views of others and the design criteria Identify differences, similarities or changes related to simple scientific ideas and processes
Know that some materials change state when they are heated or cooled
ask relevant questions
setting up simple practical enquiries,
make systematic and careful observations
use simple scientific language, drawings, labelled diagrams,
identify differences, similarities or changes related to simple scientific ideas and processes

## COMPUTING SCIENCE

apply their understanding of computing to program, monitor and control their products
design, write and debug programs that accomplish specific goals
solve problems by decomposing them into smaller parts
use repetition in programs
use logical reasoning to explain how some simple algorithms work and detect and correct errors

UKS2
Year 5/6

## DESIGN

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
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

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

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

Understand seasonally where things are grown
Understand the principles of a varied diet
prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
locate the world's countries and regions using maps
understand aspects of human geography eg. Types of settlement and land use, economic activity and the distribution of natural resources

