Design

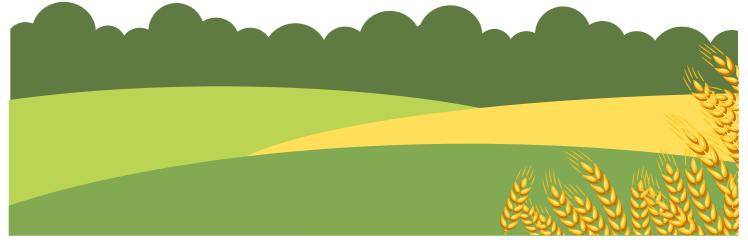




In Early Years, children create collaboratively by sharing ideas, resources and skills.

In Key Stage 1, children are taught to use their own ideas to design a product based on given criteria. Children are also taught to draw and label the materials and components of the product, explaining why they have chosen them.

In Key Stage 2, children conduct research using different sources to contribute to the development of specific design criteria for a functional product, explaining how it will appeal to the specific user. Children generate, develop and communicate ideas through discussion, annotated sketches, pictorial representations and the analysis of existing models. Children will be taught to create a range of annotated sketches and diagrams which fulfils the design criteria by explaining how materials and components will be attached, with the use of accurate measurements. Children will be taught to produce a detailed, step-by-step plan of their chosen design.









In Early Years, children safely use and explore a variety of materials, tools and techniques experimenting with colour, design, texture, form and function.

In Key Stage 1, children choose resources, materials and tools appropriately, explaining why they have chosen them. Children will be taught to join and measure materials and components in different ways.

In Key Stage 2, children formulate and follow a step-by-step plan to guide making, listing tools, equipment, materials and components. Children will be taught to measure accurately and competently select from a range of tools and equipment to accurately assemble materials to produce a reliable, functional product.



Evaluate

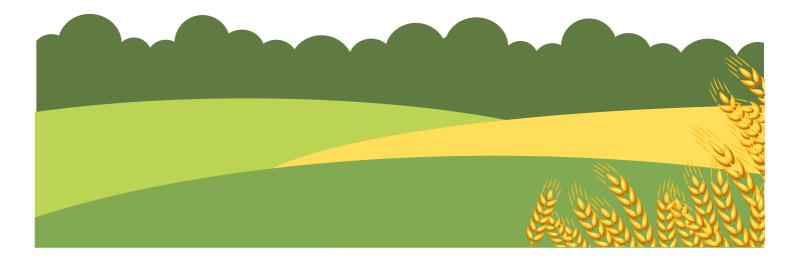




In Early Years, children share their creations and explore how things work explaining the processes they have used.

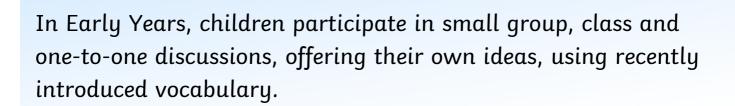
In Key Stage 1, children will be taught to evaluate, describe and explain what works well and not so well in their existing product, suggesting and explaining improvements to their product for next time.

In Key Stage 2, children are taught to continually evaluate and modify the working features of the product to match the initial design specification. Children will be taught to test their final product to demonstrate the effectiveness for the intended user and purpose. In addition, children will be taught to compare and analyse a range of existing products against their own linked to appearance, functionality and ability, suggesting and justifying improvements to the finished product.





Technical Language



In Key Stage 1, children will be taught how to use levers and sliders in construction and how to join two pieces of material together with a running stitch in textiles.

In Key Stage 2, children will be taught to understand how gears and pulleys can be used to speed up, slow down or change direction of movement. Children will also be taught how a 3D product can be made from a combination of accurately made pattern pieces through the use of a range of stitches that are strengthened, stiffened and reinforced when appropriate in textiles.

