

Designing

About designing

When designing, children need to understand the context they are working in, think about who their products will be for and decide what tasks they will perform. They need opportunities to generate, develop, model and communicate ideas in a variety of ways, including spoken language, drawings, templates, mock-ups, prototypes and pattern pieces.



KS1 - What their products are for
Children should be able to clearly state the purpose of their products. The products children design and make at KS1 should perform clearly defined tasks e.g. a jacket to help keep Teddy safe at night.



KS1 - Use knowledge of existing products
When children are generating ideas it is good practice for these to be informed by existing products they have explored and evaluated e.g. moving picture books.

Designing	Key Stage 1	Key Stage 2
Understanding contexts, users and purposes	Across KS1 pupils should: - work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment - state what products they are designing and making - say whether their products are for themselves or other users - describe what their products are for - say how their products will work - say how they will make their products suitable for their intended users - use simple design criteria to help develop their ideas	Across KS2 pupils should: - work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment - describe the purpose of their products - indicate the design features of their products that will appeal to intended users - explain how particular parts of their products work In early KS2 pupils should also: - gather information about the needs and wants of particular individuals and groups - develop their own design criteria and use these to inform their ideas In late KS2 pupils should also: - carry out research, using surveys, interviews, questionnaires and web-based resources - identify the needs, wants, preferences and values of particular individuals and groups - develop a simple design specification to guide their thinking
Generating, developing, modelling and communicating ideas	Across KS1 pupils should: - generate ideas by drawing on their own experiences - use knowledge of existing products to help come up with ideas - develop and communicate ideas by talking and drawing - model ideas by exploring materials, components and construction kits and by making templates and mock- ups - use information and communication technology, where appropriate, to develop and communicate their ideas	Across KS2 pupils should: - share and clarify ideas through discussion - model their ideas using prototypes and pattern pieces - use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas - use computer-aided design to develop and communicate their ideas In early KS2 pupils should also: - generate realistic ideas, focusing on the needs of the user - make design decisions that take account of the availability of resources In late KS2 pupils should also: - generate innovative ideas, drawing on research - make design decisions, taking account of constraints such as time, resources and cost

Late KS2 - Carry out research

Children in late KS2 should carry out research, using surveys, interviews, questionnaires and web-based resources e.g. survey of favourite soups in Year 5.



KS2 - Prototypes and pattern pieces

Whilst continuing to carry out activities from KS1 where they are making templates and mock-ups, across KS2 children should also 'model' their ideas by using prototypes and pattern pieces e.g. for a bag or hat.

