

# DT—Year 5—Phone Holder

## Design Brief

To design and make a phone holder that will protect and transport a phone.



## Year 4 Design Skills

- Investigate existing products, including drawing them to analyse and understand how they are made.
- Plan a sequence of actions to make a product.
- Develop more than one design.
- Generate designs with annotated sketches.
- Refine work and techniques as work progresses, continually evaluating the product design.
- Identify strengths and weaknesses of their design ideas.
- Talk about how closely their finished product meets their design criteria and meets the need of the user.
- Disassemble products to understand how they work.
- Improve on existing designs, giving reasons for choices.

## Year 5 Design Skills

- Undertake research to inform design process. This may include surveys and interviews.
- Use prototypes, cross sectional diagrams, exploded diagrams and CAD software to represent diagrams.
- Consider the views of others when evaluating their own work.
- Ensure products have a high quality finish, using art skills where appropriate.
- Justify their decisions about materials and methods of construction.
- Make suggestions on how their design/ products can be improved.
- Use knowledge of inventors, designers, engineers, chefs and manufactures who have developed ground breaking products to create their own innovative designs.

## Textiles Skills

### Year 4

- Use appropriate decoration techniques e.g. applique (glued or simple stitches).
- Join fabrics using running stitch, over sewing, back stitch.
- Explore fastenings and recreate some e.g. sew on buttons and make loops.
- Pin template to fabric.
- Prototype a product using J cloths.

### Year 5

- Understand seam allowance.
- Create 3D products using pattern pieces and seam allowance.
- Understand pattern layout.
- Decorate textiles appropriately often before joining components.
- Pin and tack fabric pieces together.
- Join fabrics using running stitch, over sewing, back stitch or machine stitching.
- Decorate textiles appropriately often before joining components.

## Vocabulary

telephone	design	over stitch
mobile phone	criteria	back stitch
Alexander	product	pattern
Graham Bell	material	pieces
Martin	fabric	dimensions
Cooper	seam	evaluate
scientist	allowance	pin
engineer	join	tack
inventor	stitching	measurement
design	running stitch	

## Design Process

### Research

Look at a product to see how it has been made.

### Skills

Practise and learn new skills to make the final product.

### Design

Design the product using knowledge from research and skills learned.

### Prototype

Make the prototype and identify any changes needed for the final design.

### Make

Make the final product using skills learned.

### Evaluate

Evaluate the final product.