

Design Technology- Make Progression

Reception:

- Model with playdough/clay.
- Explore/use construction kits to build basic structures.
- Explore and safely use a variety of materials, tools and techniques.
- Develop appropriate holding of equipment.
- Begin to create their design using basic techniques.
- Start to build structures, joining components together.
- Look at simple hinges, wheels and axles. Use technical vocabulary when appropriate.
- Begin to use scissors to cut straight and curved edges and hole punches to punch holes.
- Use basic adhesives to join material.

Year 1:

Recap - Explore and safely use a variety of materials, tools and techniques.

Look at simple hinges, wheels and axles. Use technical vocabulary when appropriate.

Explore and safely use a variety of materials, tools and techniques.

- Make their design using appropriate techniques.
- Use construction kits, materials, textiles and mechanical components.
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
- Choose suitable equipment eg scissors and a hole punch safely.
- With help, measure, mark, cut and shape a range of products.
- Join and assemble materials and components together using a variety of temporary methods e.g. glues or masking tape.
- Begin to make their design using appropriate techniques.
- Begin to build structures, exploring how they can be made stronger, stiffer and more stable.
- Begin to use simple finishing techniques to improve the appearance of their product.

Year 2:

Recap -

Discuss using construction kits, materials, textiles and mechanical components.

Choose suitable equipment.

- Use vocabulary to begin to describe how a tool can be suitably used.
- With help measure, mark, cut and shape components with increasing accuracy.
- Start to join, assemble and combine materials in order to make a product.
- Use basic sewing techniques.
- Use hand tools safely and appropriately.
- Make simple changes to their design as they make.
- Begin to select tools and materials; use correct vocabulary to name and describe them.
- Build structures, exploring how they can be made stronger, stiffer and more stable.
- Demonstrate how to cut, shape and join fabric to make a simple product.
- Start to choose and use appropriate finishing techniques.

Year 3:

Recap - Use basic sewing techniques.

Use hand tools safely and appropriately.

Make simple changes to their design as they make.

- Select suitable tools and techniques for making their product.
- Explain using appropriate vocabulary why they should use particular tools.
- Use a design criteria whilst making a product.
- Order the main stages of making.
- Measure, mark, cut, shape and assemble components with more accuracy.
- Measure, cut, tape or pin and join fabric with improved accuracy.
- Use finishing techniques with some accuracy to strengthen and improve the appearance of their product.
- Make appropriate changes to their design through equipment and materials as they make.

Year 4:

Recap - Select appropriate tools and techniques for making their product.

Use finishing techniques with some accuracy including skills learnt in Art.

Start to understand that mechanical systems such as levers and linkages or pneumatic systems create movement.

Know how simple electrical circuits and components can be used to create functional products.

- Join and combine materials and components accurately in temporary and permanent ways.
- Sew using a range of different stitches, weave and knit.
- Measure, tape or pin, cut and join fabric with some accuracy.
- Use simple graphical communication techniques.
- Work safely and accurately with a range of simple tools.
- Select a wider range of tools and techniques for making their product safely.
- Understand how to reinforce and strengthen a 3D framework.
- Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.

Year 5:

Recap - Select appropriate tools and techniques for making their product.

Measure, mark, cut and shape a range of materials, using appropriate tools, equipment and techniques.

- Measure and mark out accurately.
- Use skills in using different tools and equipment safely and accurately.
- Select appropriate materials, tools and techniques e.g. 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.
- Use materials with awareness of conservation.
- Weigh and measure accurately (time, dry ingredients, liquids).
- Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.

Year 6:

Recap - Measure and mark out accurately.

Use skills in using different tools and equipment safely and accurately.

Select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately.

- Accurately measure, mark out, cut and shape materials and components.
- Accurately assemble, join and combine materials and components.

- Accurately apply a range of finishing techniques, including those from art and design.
- Assemble components to make working models.
- Aim to make and to achieve a quality product.
- With confidence pin, sew and stitch materials together to create a product.
- Demonstrate when make modifications as they go along.
- Construct products using permanent joining techniques.
- Use techniques that involve a number of steps.
- Demonstrate resourcefulness when tackling practical problems.
- Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.