



Sledmere and Wetwang Federation

Whole School Progression Map – Design and Technology

At Sledmere and Wetwang Federation our **intent** is to make Design and Technology an inspiring, rigorous and practical subject. Pupils will use creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts.

Our **intent** is that all children:

- Achieve their potential.
- Experience high quality teaching and learning at all times.

We **implement** our Design and Technology curriculum through:

- In EYFS, we implement DT by providing children with a wide range of indoor and outdoor construction equipment, from planks and blocks to junk modelling. This provision is in place every day to support children with developing their understanding of why they build and how to adapt it when necessary. Adult interactions support children's knowledge and vocabulary, including skills involved with balancing, constructing, joining, assembling and fixing.
- A learning sequence of Design, Test, Make and Evaluate.
- High quality modelling and scaffold DT skills in order for all children to achieve excellence.
- Nurture and relationships allow adults to support children to experiment and challenge themselves.
- Learning journeys that reflect what is being taught.
- Learning that is high quality, showing a range of DT and evidence the highest expectations.
- Learning across the curriculum is sequentially planned to build on knowledge and skills.
- Use of a range of high-quality resources and equipment.

The **impact** of our Design and Technology approach is children design, test, make and evaluate purposeful products and are proud of their creations. Pupils will learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens.



Class 1 and Class 2

EYFS

Creating with Materials ELG

Safely use and explore a range of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Share their creations, explaining the process they have used.

Make use of props and materials when role playing characters in narratives and stories.

Y1

Design:

Design purposeful, functional, appealing products for themselves and other users based on design criteria.

Talk about their ideas and explain what will be done.

Make:

Select from and use a range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing.)

Evaluate:

Explore and evaluate a range of existing products.

Use appropriate terms to talk about their own and others' work.

Technical knowledge:

Build structures exploring how they can be made stronger, stiffer and more stable.

Cooking:

Understand where food comes from.

Know the benefits of fruit and vegetables.

Y2

Design:

Design purposeful, functional, appealing products for themselves and other users based on design criteria.

Talk about their ideas and explain what will be done.

Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, computing. (E.g. use wheels, sliders and levers in plans.)

Make:

Select from and use a range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]

Evaluate:

Evaluate their ideas and products against design criteria.

Recognise what they have done well and talk about what could be improved.

Seek out the views and judgements of others.

Predict how changes will improve the finished product.

Technical knowledge:

Build structures exploring how they can be made stronger, stiffer and more stable.

Explore and use mechanisms (e.g. levers, sliders, wheels and axles) in their products.

Y3

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 ideas through discussion and annotated sketches.

Make:

Select from and use a wider range of tools and equipment to perform practical tasks (e.g. cutting, shaping and joining) accurately using scissors, tape, glue, drill and hole punch.

Select from and use a wider range of materials and components, including construction materials, textiles and ingredients.

Evaluate:

Investigate and analyse a range of existing procedures (home and school).

Evaluate their ideas and products.

Understand how key events and individuals in design and technology have helped shape the world.

Technical knowledge:

Understand and use mechanical systems in their products (e.g. gears, pulleys, cams, levers and linkages.)

Cooking:

Use and apply the principles of a healthy and varied diet.

Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.



Years 4,5 and 6

Design:

Use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for the wider environment.

Generate, develop, model and communicate their ideas through cross section, exploded and computer aided diagrams.

Make:

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 range of materials and components, including textiles, textiles and ingredients according to their functional properties and aesthetic qualities.

Make separate elements of a model before combining into the finished article.

Produce a simple instruction manual or handbook for their product.

Evaluate:

Investigate and analyse a range of existing products. (Leisure, culture, enterprise, industry and the wider environment.)

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 change the world.

Technical knowledge:

Understand and use electrical systems in their products (e.g. circuits incorporating switches, bulbs, buzzers and motors).

Apply their knowledge of how to strengthen, stiffen and reinforce more complex structures.

Apply their understanding of computing to program, monitor and control their products.

Cooking:

Understand and apply the principles of healthy and varied diets.

Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.



Class 1 EYFS Y1		Class 2 Y2 Y3		Class 3 Y4 Y5 Y6	
+design, (test), make and evaluate					
materials tools colour design	ideas products cutting shaping joining finishing products fruit vegetables	generate develop model templates mock-ups wheels sliders levers materials components construction materials textiles ingredients select tools mechanisms: - levers - sliders - wheels - axles dishes healthy	innovative functional appealing annotated sketches practical tasks accuracy investigate analyse design criteria reinforce invent safety cutting stable mechanism mechanical systems: - gears - pulleys - cams - levers - linkages varied diet prepare and cook savoury	cross-section exploded diagram computer-aided design functional properties aesthetic qualities leisure culture enterprise industry electrical systems: - circuits - bulbs - buzzers - motors strengthen stiffen reinforce cooking techniques sweet seasonality ingredients: grown reared caught processed	fastening compartment zip button structure finishing technique strength weakness stiffening templates stitch seam seam allowance wadding reinforce right side wrong side hem template pattern pieces pins needles thread pinking shears