DT Learning Journey – KS2

Computer Aided design box

Design products using Tinker CAD, demonstrating control and debugging strategies.

Titanic cross section

Create circuits that employ a number of components

Cross-stitching

Create objects with seam allowances, using a combination of stitching techniques and manipulating the qualities of embellishments to reflect the purpose of the item.

All strands of DT, except food technology, are taught using a spiral curriculum. Learning between year groups and phases is then assimilated and built upon in varying contexts. This is so children master design strategies through a range of challenges and learning opportunities.

WW2 chocolate depression cake

Pittas and tzatziki

Sploosh

Understand the importance of storing/handling ingredients, including microoorganisms. Measure accurately and scale up/down recipes. Demonstrate a range of cooking/baking techniques. Create and refine recipes, including ingredients, methods, times and temperatures.

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Develop a range of practical skills to create products, such as cutting, gluing and filling.

Rafts

To design, make, evaluate and improve in Year 6, we:
Link opportunities to design with the rest of our curriculum.
Ensure products have a high quality finish, using art skills where appropriate.
Use prototypes, cross-sectional diagrams and CAD to represent designs.
Evaluate the design of products to as to suggest improvements for user experience.
Take inspiration from our great designers – Thomas Andrews (ship builder – Titanic)

Root vegetables (Vikings)

Mazes

Cut materials with precision and refine the finish with appropriate tools. Show an understanding of the qualities of materials to choose appropriate tools.

Victorian toy

Convert rotary motion to linear. Use innovative combinations in mechanics products for purpose

Tabbouleh

Ice cream

To design, make, evaluate and improve in Year 5, we:
Link opportunities to design with the rest of our curriculum.
Design with the user in mind by the service a product will offer.
Make products through stages of prototypes, making continual refreshment.
Create innovative designs that improve upon existing products.
Take inspiration from our great designers – Elijah McCoy (mechanics)

Understand the importance of storing/handling ingredients. Measure accurately and scale up/down recipes. Demonstrate a range of cooking techniques. Create and refine recipes, including ingredients, methods, times and temperatures.

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Join textiles with appropriate stitching, understanding the need for seam allowance and embellishment.

Drawstring bag

Christmas card with a buzzer

To design, make, evaluate and improve in Year 4, we:
Link opportunities to design with the rest of our curriculum.
Refine work and techniques as our work progresses, continually evaluating the design.
Use software to design and represent product designs
Disassemble products to understand how they work.
Take inspiration from our great designers – Louis Vuitton (textiles)

Cereal – food miles

Prepare ingredients hygienically using appropriate utensils. Measure ingredients to the nearest gram. Follow and evaluate recipe. Assemble ingredients Control temperature when using an oven and a hob.

Design models using Tinker CAD, demonstrating control and debugging strategies,

Design a bridge

Create series and parallel circuits

To design, make, evaluate and improve in Year 3, we:
Link opportunities to design with the rest of our curriculum.
Make products by working efficiently, such as careful selection of materials.
Improve upon existing designs, explaining our reasoning.
Take inspiration from our great designers – John Henry Knight (construction)

Hot chocolate (Maya)

Anglo Saxon bread

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Prepare ingredients hygienically using appropriate utensils. Measure ingredients to the nearest gram. Follow a recipe. Assemble ingredients Control temperature when using an oven.

Homous

'Sledging Biscuits'

Stone Age

Forager's salad

We teach all strands of DT, exploring purpose, analysis, designing, creation and evaluation.

Food	Computing	Construction	Textiles
Mechanics	Electronics	Materials	

Levered animal

3

Powered cars

Choose suitable techniques to construct, repair or strengthen items.

Cut materials accurately and safely. Measure and mark to the nearest mm. Apply appropriate cutting and shaping techniques. Select appropriate joining techniques.

Volcanoes

Use scientific knowledge of forces to choose appropriate mechanisms (levers)