Design & Technology Curriculum Journey

Design & Technology offers you a curriculum which will provide opportunities through accurate design and the use of new and existing technologies to solve relevant problems by:

taking risks • being resourceful • innovating and exploring

KS3

- Prepare a menu using seasonal ingredients.
- Find out about savoury foods from different countries and cultures used for celebration meals.
- Generate and communicate ideas
- Evaluate & Test
- Develop skills in using woodworking tools.
- To know the intended audience.

Food: celebration menu

Textiles: applique/blanket stitch

Woodwork: Morrison shelters

- Celebration Menu (including courses from other cultures): Cut • Chop • Season • Cook • Bake • Fry • Grill • Mix
- Make a working prototype.
- Identify a problem based on data.
- Use CAD to draw detailed plans.

YEAR 6

- Use skills of cutting, joining and finishing to produce a structure.
- Evaluate the idea against design criteria
- Using knowledge of Mexico and its climate from to learn about the types of foods grown in the Mexican climate.
- To know the electrical components that can be operated using programming.
- Generate and communicate ideas

Materials: bridges and engineering

Food form other countries - Fajitas

Levers and Pulleys

- Understand the importance of structural engineering in providing man-made solutions to problems.
- Identify and evaluate best value versus highest quality.
- Prepare and cook a savoury dish using a range of cooking techniques.
- Use programming and control features to refine and improve a product.

YEAR 5

- Understand and use electrical systems.
- How do I use shape, pattern and orientation to create the best possible design?
- Use the principles from the Eatwell guide to plan and make a healthy lunch.
- To evaluate a range of food packaging
- Evaluate against the design criteria and the views of others

Electrical products: making a game

Textiles: pattern pieces/running stitch and back stitch

Food: on-the-go lunch product including packaging materials

- Construct a working electrical circuit.
- To retrieve scientific knowledge about series circuits.
- Use the skills of appliqué, embroidery and beading to create textiles.
- What is a pattern piece and how can I use it to inform design?
- Design packaging for a food product.

YEAR 4

- Use appropriate materials and tools to produce a finished product.
- Evaluate recipes and identify healthy ingredients.
- Use mechanical systems to create movement.
- Use scientific knowledge of light and shadow.
- Generate and communicate ideas

Food: Making soup

Mechanisms: wheels and moving cams; moving toys

Exploring materials: shadow puppets

- Generate, develop, model and communicate ideas
- Know what cams do, explore their movements and understand how to use them.
- How successful was my finished product?
- What types of materials are best for creating shadows?

YEAR 3

- What are mechanisms and their components?
- Hot cross buns: Weighing • Measuring • Mixing • Kneading • Proving • Decorating • Baking
- Evaluate & Test
- Explore a mechanism

Mechanisms: Aircraft with moving parts

Food: baking, hot cross buns

Building structures: trebuchets

- Evaluate the idea against design criteria
- Design, Develop, Model, Communicate, Template, Mock-up
- Understand:
  - where food comes form
  - The basic principles of a healthy and varied diet
- Build structures
- Cutting, shaping and joining materials

YEAR 2

- How is a puppet made?
- Generate, develop, model and communicate ideas
- Evaluate the idea against design criteria
- Fruit Kebabs: • Chopping

Puppets: Designing, Cutting and Joining:

Puppets: Textiles and Stitching

Food: Healthy and varied diet Fruit Kebabs

- Materials: Textiles and components
- Understand:
  - where food comes form
  - The basic principles of a healthy and varied diet

YEAR 1

- Safely use and explore a variety or materials, tool and techniques, experimenting with colour, design, texture, form and function.
- Share their creations, explaining the process they used.
- Use a range of small tools, including scissors, paint brushes and cutlery
- Begin to show accuracy and care when drawing

Throughout EYFS, children will have opportunities to develop a range of skills shown above. They will also do specific projects including: food on the farm, cars with moving wheels and use of recycled materials.

EYFS

Investigate • Design & Prototype • Analyse & Evaluate • Core Technical Skills