Design and Technology

Year 9



OVERVIEW

In Design Technology we offer an inclusive curriculum that allows pupils to learn about a wide range of knowledge and skills based on the disciplines of cooking & nutrition, product design & resistant materials. Each component subject is taught on a termly rotation.

In Year 9, students develop deeper knowledge around the environmental impact of ingredients and develop a wider range of design approaches including iterative design & biomimicry.

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The final stage of the cooking & nutrition journey investigates the importance of presentation, along with time management skills. Pupils also learn about the provenance of ingredients and the effect of "food miles" on the environment. World foods is the theme for the rotation.

Dishes produced in Year 9: Mac 'n' Cheese; Lasagne; Curry; Minestrone; Ruff-Ses Rolls; Veggie Burgers and Fudge Cake.

ASSESSMENT

Pupils are teacher assessed on a range of practical cooking skills including safe working, quality of outcome and evaluations.

This is reported as a termly percentage.

PERSONAL DEVELOPMENT

Cooking skills are developed to allow them pupils lead a healthy lifestyle.

They understand how to cook a range of dishes from around the world.

PRODUCT DESIGN

Mechanical CAM Toy

- Design and making skills: End product is a mechanical CAM toy Recapping safe workshop practice with knowledge and understanding of how to use tools and machinery correctly.
- Understanding types of timber joints (theroy and practical working)
- Learning techniques to successfully sketch and refine ideas in a product design style
- Motion and mechanisms
- · Isometric drawing
- Orthographic projection
- Heat bending theory and practical application
 Production planning
- Project evaluation

ASSESSMENT

For each project, pupils are teacher assessed on the quality of their designing, practical outcomes, and evaluation skills.

This is reported as a termly percentage.

PERSONAL DEVELOPMENT

Pupils understand their design responsibilities to produce products that are suitable for a range of different users.

They ensure products are safe to use as required by law.

Mad Hatters Hat

Textiles skills – Mad Hatters (making hats) - students build on their textiles skills by making a 3-d product, focusing on creating a quality product to fit the needs of the user, product should be fit for purpose and function as intended, students will use recycled fabrics to follow in line with sustainability and environmental issues – students in year 9 complete 4 shorter rotations and then choose a final DT option for the summer term.

ASSESSMENT

For each project, pupils are teacher assessed on the quality of their designing, practical outcomes, and evaluation skills.

This is reported as a termly percentage.

PERSONAL DEVELOPMENT

Pupils are given the chance to work as teams and show resilience when working together.

They understand the need to protect the natural world.

Useful resources for supporting your child at home:

- Knowledge Organiser The Design Technology knowledge organisers contains key facts students need to know about key concepts, tools and techniques. You could test your child on their ability to remember these facts or get your child to self-quiz using the 'Read, Cover, Write, Check' technique.
- Cooking Encourage your child to cook at home, whether for pleasure or to provide meals for the whole family.