



DT at Westfields Junior School

Design and Technology provides children with the opportunity to become engineers, designers and inventors of the future. At Westfields Junior School, our DT curriculum encourages children to develop skills of creativity, problem solving and evaluation whilst also promoting independence and team work. We are providing them with the skills to handle a rapidly changing world and to also be curious about the world around them.

Our planned termly topics identify a clear purpose for designing and creating future products as well as make links to other curriculum areas. Through sequential lessons, children will be equipped with the ability to identify issues with products as well as the needs of a consumer.

Consequently, they will use this knowledge to support their product development and subsequent creation.

Through the study of Design and Technology, learning combines practical skills with an understanding of aesthetic, social and environmental issues, as well as functions and industry. This allows them to evaluate past and present technology, its uses and impact.

Coverage

- Through a variety of creative and practical activities, children are taught the knowledge, understanding and skills needed to engage in an iterative process of designing, making and evaluating.
- Through termly projects based on a range of relevant contexts with links to other curriculum areas, children carry out their learning using a clear 5 stage creation process; evaluating existing products, developing technical knowledge, designing products, using tools (including health and safety) and evaluating finished results.
- DT booklets are produced in order for children to record their learning, project and skill development from the beginning of a topic through to the final evaluation.
- Projects are designed to give children the opportunity to develop practical skills before creating their final piece.
- The opportunity to participate in food technology is offered in every year group (sushi, Greek salad, bread and fruit tarts).

Progression

- At Westfields Junior School, we have a set plan for progression in relation to the use of tools and equipment.
- As children move through the school, the complexity of projects increase e.g. making greeting cards in Year 3, using levers and linkages through to Year 5 where children make moving toys using wood, saws and cam mechanisms.
- Designing – Year 3 begin with simple labelled diagrams which become more detailed and labelled with key vocabulary and measurements through Years 4 and 5. Once in Year 6, children design using CAD software.
- Sewing – Year 4 use running stitch and back stitch. Year 5 use running stitch, back stitch and cross stitch, adding embellishments on e.g. buttons.
- Cooking – Year 3 have recipes to follow when making sushi, Year 4 use tools and techniques to make their Greek salad, Year 5 create their recipes, add in additional ingredients, measure them and use techniques when making bread and Year 6 create their fruit tarts with little adult input.

Enrichment

- Christmas Extravaganza
- Fiver Challenge
- Creative Days
- Cooking at Yateley Comprehensive school
- Yateley and Frogmore DT day for Y5
- STEM Week

Cross-Curricular Links

- Year 3 – Shelter links to the History topic of the Stone Age; Sushi has links to Geography; Moving Vehicles links to forces in Science.
- Year 4 – Greek Salad has links to the History and Geography; Warning systems has links to Science and Geography,
- Year 5 – Creation of the moon buggy links in with Computing and Science; Pillows link to Art with design and pattern; Bread making links to Geography.
- Year 6 – Shelters link to History and WWII; Fruit tarts link to Geography and Science with the ingredients being locally sourced and in season fruit; 3D CAD design links in with Coding and Maths.
- Maths – Measurements.
- English – Instructional writing.
- PSHE – Risk assessment, healthy lifestyles

Assessment

- Whole class and verbal feedback.
- Use of retrieval practice at the beginning and end of lessons.
- Use of quizzes, starter and plenary activities.
- Teacher assessment, self-assessment and peer assessment of tasks in DT folders and projects completed.
- Referral to the progression document.
- Completion of the DT Foundation Subject Assessment document identifying children not achieving expected standard and those exceeding.

Inclusion and Challenge

- Everyone has access to the Design Technology Curriculum.
- Key vocabulary is shared and discussed throughout lessons.
- Key skills are modelled by adults and children.
- Retrieval practice promotes deeper knowledge.
- Key questions develop a deeper level of thinking.
- Secure teacher subject knowledge promotes support and extension through teaching approaches. and strategies, task design and differentiation.
- To support and challenge children, differentiation will include: self-selection and tiered activities; resources and choice of techniques used; differentiation through outcome; adult support and peer-support.
- Differentiated booklets are designed for children to complete during DT lessons.
- Across all year groups, children are given an opportunity to practice key skills/techniques e.g. sewing and sawing.
- A range of materials are accessible e.g. easier to thread needles.
- Children are challenged through additional measures e.g. limiting the resources to create an emergency shelter in Year 6.