

Design and Technology Intent statement

Intent: Introduction, Vision and Philosophy

The purpose of this document is to clarify the how, why, and what of Design and Technology teaching at Weston Schools Federation. This is to be used by staff to clarify expectations, highlight the resources that we have at our disposal, and to ensure that a high-quality Design and Technology curriculum is being taught to all.

Design and Technology is a highly practical and creative subject, which will equip children with many of the life-skills that they will need for the future. Learning about how to fix things, build things, create and problem-solve are vital, and encompass some of the main skills that we want children to have when they leave. Design and Technology is all about solving real problems, and as such, is taught in the context of lots of different disciplines; children will use their understanding of Design and Technology which links to other subjects including Computing, Geography, and learn about food and nutrition within Science. They will use their design skills to help them create Art, and in History, learn about how design and technology have helped shape the world.

Implementation: What does Design Technology look like at Weston Schools Federation?

We use the National Curriculum in England 2014 framework for Design and Technology as the basis for curriculum planning. We develop our medium-term plans using a range of sources, including commercial online resources available from the National Stem Centre and other curriculum providers. While there are opportunities for pupils of all abilities to develop their skills and knowledge in each teaching unit, the planned progression built into the Design and Technology curriculum means that the pupils are increasingly challenged as they move through the school.

Design and Technology is taught by individual class teachers who take responsibility for acting on the plans provided. Teachers are responsible for resourcing and delivering this area of the curriculum. Teachers have responsibility for ensuring that there is a suitable risk assessment in place. The subject coordinators and Senior Leaders will ensure that risk assessments, planning and resourcing has been reviewed and approved.

Design and Technology is an enjoyable practical learning experience and pupils learn how to manage risks sensibly and within the remit of risk assessments. Pupils undertake a termly Design and Technology project at least three times a year. Where possible, cross curriculum links are made to ensure Design and Technology is used to support or drive other subjects. Design and Technology is taught throughout the year including Mechanisms, Food,

Structures, Sculptures, Textiles (KS1 and KS2). We aim to provide varied lessons, both in presentation and outcome, to allow children to fully immerse and engage with the subject. Often, Design and Technology requires a lesson period of 45 minutes / 1 hour, these lessons are taught weekly over the course of the unit.

Whole school DT Coverage

| Year group/Term | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|-----------------|---|--|------------------------------------|---|---|---|
| EYFS | To experiment to create different textures. To understand that different media can be combined to create new effects. To manipulate materials to achieve a planned effect. To construct with a purpose in mind, using a variety of resources. To use simple tools and techniques competently and appropriately. To select appropriate resources and adapt work where necessary. To select tools and techniques needed to shape, assemble and join materials they are using. | | | | | |
| Year 1 | | DT – 3D sculptures DT – Sliders and Leavers (Cards) | DT- sewing puppets | DT- wheels and axels | | DT – Cooking and Nutrition (food and nutrition) |
| Year 2 | | DT – Levers and Sliders | DT – clay lamp/candle holder | DT – Junk modelling | DT – Cooking and Nutrition (Healthy sandwiches) | |
| Year 3 | DT – Cooking and Nutrition (fruit salad) | | | DT – design a patchwork quilt for Stone Age | | DT - Mosaic clay pot |
| Year 4 | DT Anglo Saxon House | | | DT – make a model of rainforest in a jar | DT – Mayan Headdresses | |
| Year 5 | | DT – Cooking and Nutrition (making bread) | DT – construction linked to forces | | | DT - Printing on textiles Linked to fair trade |
| Year 6 | | | DT – African tribal mask | | DT – WW2 cooking (rationing) | DT – build a theme park |

We teach Design and Technology in our Reception classes as an integral part of the topic work covered during the year and as set out in the Early Years Foundation Stage Framework which underpin the curriculum. We encourage the development of skills; knowledge and understanding that help pupils make sense of their world as an integral part of the school's work. This learning forms the foundations for later work in Design and Technology. These early experiences include asking questions about how things work, investigating and using a variety of construction kits, materials, tools and products, developing making skills and handling appropriate tools and construction material safely and with increasing control. We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. These activities, indoors and outdoors, attract the pupil's interest and curiosity.

Impact: Evidence and Assessment

The Design and Technology curriculum will make a profound and positive impact on the outcomes of every pupil. The structure enables us to return to core knowledge and skills throughout the course, embedding key practises and understanding core knowledge of each unit is supported by the progression of skills which details the key vocabulary and key questions.

We create strong and appropriate links with other subjects to enhance the curriculum and learning experience, predominantly but not exclusively with maths, literacy, music, PSHE, geography, history and PE.

Each project assesses the knowledge and skills pupils have learnt. They will reflect and evaluate their progress and their development points before, during and after each project/unit.

This includes:

- Assessment for learning
- Challenge tasks
- Enquiry tasks
- Standards of learning in books and products
- Multiple choice and end of unit questions and pupil voice