



# Design and Technology

## Curriculum Rationale

**At Our Lady of Lourdes, we really value Design Technology. WE ARE ALL DESIGNERS!** We want our pupils to appreciate design and technology. We want them to have no limits to what their ambitions are and grow up wanting to be architects, graphic designers, chefs or carpenters! We want them to embody our Christian core values.

We all embrace the school motto of: "I can great things with God's love" – this is both spiritually and academically.

High quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. The Design and Technology curriculum has been carefully designed so that our pupils develop their designing knowledge and skills. We want all our pupils to remember their Design and Technology learning in our school, to cherish these experiences and embrace the opportunities they are presented with.

**"Design is not just what it looks like, design is how it works" – Steve Jobs.**

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

## Design Technology subject Intent:

At Our Lady of Lourdes RC Primary School, we intend to build a Design Technology curriculum which is inspiring, rigorous, and practical. We want our children to use creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We intend for all children to acquire appropriate subject knowledge, skills and understanding as set out in the National Curriculum. It is our aim to create strong cross curricular links with other subjects, such as Mathematics, Science, Computing, and Art. We want Design and Technology to prepare our children, to give them the opportunities, responsibilities, and experiences they need to be successful in later life.

### Implementation:

Design and Technology is a crucial part of school life and learning and it is for this reason that as a school we are dedicated to the teaching and delivery of a high-quality Design and Technology curriculum. This is implemented through:

- A well thought out, whole school, yearly overview of the DT curriculum which allows for progression across year groups in all areas of DT (textiles, mechanisms, structures, food and electrical systems)
- Well planned and resourced projects providing children with a hands-on and enriching experience
- A range of skills being taught ensuring that children are aware of health and safety issues related to the tasks undertaken
- Teachers being given ownership and flexibility to plan for Design and Technology; often teaching DT as a block of lessons to allow the time needed for the children to be critical, inventive and reflective on their work.
- Each project from Year 1 to Year 6 addressing the principles of designing, making, and evaluating and incorporating relevant technical knowledge and understanding in relevant contexts.
- Pupils being introduced to specific designers, chefs, nutritionists, etc. helping to engender an appreciation of human creativity and achievement and increase the cultural capital from which they can draw in the future.

### Early Years Foundation Stage

During the EYFS pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities. They have the opportunities to learn to:

- Use different media and materials to express their own ideas
- Use what they have learnt about media and materials in original ways, thinking about form, function and purpose
- Make plans and construct with a purpose in mind using a variety of resources
- Develop skills to use simple tools and techniques appropriately, effectively and safely
- Select appropriate resources for a product and adapt their work where necessary
- Cook and prepare food adhering to good health and hygiene routines.

### Impact:

Children will have clear enjoyment and confidence in Design and Technology that they will then apply to other areas of the curriculum. Through carefully planned and implemented learning activities the pupils develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. They gain a firm foundation of knowledge and skills to see them equipped to take on further learning in High School.

We use both formative and summative assessment information in Design Technology. Assessment informs learning to ensure that all pupils including disadvantage and those with

SEND achieve highly and acquire the knowledge, skills and concepts they need to succeed in life. Staff use assessment information to inform their short-term planning and address misconceptions. This helps us provide the best possible support for all of our pupils. The end points for each phase have been carefully mapped out and further broken down. This means that the essential knowledge and skills in Design Technology are progressive and build year on year.

Our well-constructed curriculum in Design Technology leads to pupils' successful learning. This is evidenced in the outcomes within class books and practical work produced. Pupils are well prepared for the next steps and stages of their learning due to the progressive and well sequenced curriculum. As a result, pupils make excellent progress, they know more and remember more, as they move through the Design Technology curriculum at Our Lady of Lourdes RC Primary School.

# Design Technology Curriculum Overview 2023-2024

|           | Autumn 1                             | Autumn 2                                                  | Spring 1                                                      | Spring 2                               | Summer 1                                                       | Summer 2                                                                                                                                                      |
|-----------|--------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nursery   | Hedgehog Hotel & Autumnal Collage.   | Design and make poppies, fireworks pictures, owl collage. | Winter<br>Penguin beds<br>Chinese Lanterns<br>Chinese Dragons | Spring<br>Building castles             | Creating houses for the three pigs.<br>3d Dragons.<br>Rockets. | Design and make an alien crown.                                                                                                                               |
| Reception | Using Scissors                       | Creating musical instruments.                             |                                                               | Spring Weather<br><br>Where do I live? | Design and make a jungle mask – collage.                       | Design and make the bears furniture with lego.<br>People who help us- Using tools.<br>Creating friendship bracelets.<br>Building homes from around the world. |
| Year 1    | Design and make a house from 1666.   |                                                           | Design and make a fruit salad.                                |                                        | Create a free standing structure.                              |                                                                                                                                                               |
| Year 2    | Design and make a moving vehicle.    |                                                           |                                                               | Design and make a healthy sandwich.    |                                                                | Design and make a puppet with moving parts.                                                                                                                   |
| Year 3    | Design and make a floating Garden.   |                                                           | Practical Action – Beat the flood.                            |                                        | Design and make an Egyptian Sarcophagus.                       |                                                                                                                                                               |
| Year 4    |                                      | Design and make Festive gifts.                            |                                                               | Design and make a pop up card or book. |                                                                | Savoury Baking                                                                                                                                                |
| Year 5    | Design and make festive decorations. |                                                           |                                                               | Design and make a seasonal soup        |                                                                | Design, sew, make, do and mend: Textiles.                                                                                                                     |
| Year 6    | Marbulous Structures                 |                                                           |                                                               |                                        | Design and make a shelter.                                     | Design and make a Phones Case.                                                                                                                                |