

## Picknalls First School

## Design Technology Curriculum Statement 2024-2025



#### Intent

At Picknalls First School our whole curriculum is driven by a commitment to fostering creativity, critical thinking, and a love for lifelong learning. We aim to provide a well-rounded education that nurtures each child's unique talents and prepares them for future challenges. We will teach children at Picknalls to have or be:

<u>Skillful</u> - At Picknalls First School we want all children to be skilful, turning new and imaginative ideas into reality through self-expression and a curiosity for learning. Children are encouraged to think creatively in all that they do and explore new ways of solving problems and answering questions.

<u>Teamwork</u> - At Picknalls First School we want all children to value and respect all members of the community. Children at Picknalls will be taught the skills for life to empower them to be good citizens and to contribute to the community. <u>Aspiration</u> - At Picknalls First School we want all children to aspire towards greatness. To be productive, aim high and succeed. Expanding their knowledge of the world by nurturing their interests as well as encouraging fearlessness of things that are new or unknown by creating exciting, inspiring opportunities.

<u>Resilient</u> - At Picknalls First School we want all children to have the mental and physical resilience to be successful and happy and be confident in tackling all obstacles that come their way.

Through these curriculum drivers we will encourage ALL children at Picknalls to become the stars of the future and shine bright in our community!

It is the intent of Picknalls First School for Design Technology to be taught in all year groups through one topic per term, led by the National Curriculum and refined by the DT leader, which includes the topics of food and nutrition, construction and mechanisms.

#### Key objectives of intent within the Design Technology Curriculum based on the National Curriculum guidance:

- Products are to be made for a purpose.
- $^{\circ}$  Individuality should be encouraged in children's design and construction of products.
- Polivery of the two strands: Designing & Making and Cooking & Nutrition.
- ${\mathbb C}$  Teaching the importance of making on-going changes and improvements during the making stages.
- $^{\mathcal{Q}}$  Looking into seasonality of ingredients and how they are grown, caught or reared.
- ${rac{arphi}{2}}$  Researching key events and individual designers in the History of Technology in KS2.

#### Aims

The National Curriculum for Design and Technology aims to ensure that all pupils:

- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently, and to participate successfully, in an increasingly technological world.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- ${}^{\mathcal{C}}$  Critique, evaluate and test their ideas and products and the work of others.
- Understand and apply the principles of nutrition, and learn how to cook.

#### **Implementation**

The teaching of Design Technology across the school follows the National Curriculum. Food technology is implemented across the school with children developing an understanding of where food comes from, the importance of a varied and healthy diet, and how to prepare this.

Design and Technology is a crucial part of school life and learning, and it is for this reason, that as a school, we aim to teach and deliver a high-quality Design and Technology curriculum, through well-planned and resourced projects and experiences. The aim is that DT lessons are inclusive to all our learners, this might mean altering an objective or removing barriers to participation depending on individual needs.

Design and Technology also embeds positive learning behaviours. It is an inspiring, rigorous and practical subject, requiring creativity, resourcefulness and imagination. Pupils design and make products that solve real and relevant problems within a variety of contexts. In our First School, Design and Technology draws upon subject knowledge and skills within Mathematics, Science, History and Art. Children learn to take risks, be reflective, innovative, enterprising and resilient. Through the evaluation of past and present technology they can reflect upon the impact of Design Technology on everyday life and the wider world.

#### **Impact**

In Design and Technology, we have three substantive concepts which weave throughout the DT curriculum as well as other curriculum areas; Design and Evaluation process, Functionality and Materials and Tools. These three aspects will be revisited every year in the DT subject.

Carrying out Design and Technology (DT) within Picknalls First School has a significant impact on primary children. It fosters creativity, critical thinking, and problem-solving skills by engaging students in hands-on projects. DT lessons also enhance fine motor skills and encourage teamwork and collaboration as students work together on various tasks. By integrating cultural capital, DT at Picknalls First School broadens students' understanding of different cultures and traditions, promoting empathy and global awareness. Overall, DT enriches the educational experience, making learning more dynamic and relevant to real-world applications.

This is currently an area of development.

The assessment of children's learning in Design Technology will be an ongoing monitoring of children's understanding, knowledge and skills by the class teacher, throughout lessons. This assessment will then be used to inform differentiation, support and challenge required by the children. On completion of each DT unit each child's record of work will be stored in their DT book along with a photograph of their completed product.

Summative assessment will be conducted termly by class teachers across each year group of the school using the Year group objectives, to inform the subject leader of progress or skills and knowledge still to be embedded.

Design Technology will also be monitored by the subject leader throughout the year in the form of book monitoring, looking at outcomes and pupil conversations to discuss their learning and understanding and establish the impact of the teaching taking place.

#### Cultural Capital in Design Technology

In the Design and Technology (DT) curriculum at Picknalls First School, we aim to help students understand and appreciate how different cultures use design and technology. We will teach cultural capital by including projects that showcase different cultures' designs and technologies. For example, children can create models inspired by buildings from various countries or learn about inventions from around the world. Teachers can also invite guest speakers from different backgrounds, organise visits to culturally significant places, and use a variety of multicultural resources. By doing this, we help children appreciate and understand the diverse world they live in, fostering creativity and empathy. Additionally, introducing children to different countries' types of foods during DT lessons can help them appreciate global culinary traditions and understand the cultural significance of various cuisines.

### Design and Technology Action Plan 2024 2025

- Subject leader to carry out book monitoring and pupil conversations to ensure that the new curriculum is being carried out effectively.
- Have 2 opportunities throughout the year for 'teacher talk' where teachers are given the time to talk to me about the new DT curriculum, support, guidance to ensure that the new curriculum is being embedded and delivered effectively.

Written by Jessica Charlesworth Design and Technology Leader



# Appendix 1

| Ш   | EYFS  | YEAR 1  | YEAR 2  | YEAR 3  | YEAR 4   |
|-----|---|---|---|---|--|
| Е   | EYFS - Autumn 1   | Year 1 - Autumn 1                               | Year 2 - Autumn 1   | Year 3 - Autumn 1   | Year 4 - Autumn  |
|     |   |   |   |   |  |
|     |   |   |   |   |  |
|     | EYFS - Autumn 2   | Year 1 - Autumn 2                               | Year 2 Autumn 2   | Year 3 Autumn 2   | Year 4 - Autumn  |
|     | Construction<br>Threading   | Construction<br>A playground                    | Construction<br>Colour monster plush                      | Construction<br>Picture frames  | Construction<br>School logo Tedd   |
|     | EYFS - Spring 1   | Year 1 - Spring 1                               | Year 2 - Spring 1   | Year 3 - Spring 1   | Year 4 - Spring 1  |
| L   | EYFS - Spring 2   | Year 1 - Spring 2                               | Year 2 - Spring 2   | Year 3 - Spring 2   | Year 4 - Spring 2  |
| Sp  | Mechanisms<br>lit pin junk modelling moving<br>parts                  | Mechanisms<br>Moving picture                    | Mechanisms<br>Litter collection trolley                   | Mechanisms<br>Shadow puppet theatre   | Mechanisms<br>Hydraulic Machine  |
|     | EYFS - Summer 1   | Year 1 - Summer 1                               | Year 2 - Summer 1   | Year 3 - Summer 1   | Year 4 - Summer  |
|     |   |   |   |   |  |
|     | EYFS - Summer 2   | Year 1 - Summer 2                               | Year 2 - Summer 2   | Year 3 - Summer 2   | Year 4 - Summer  |
| Bir | Food and Nutrition<br>thday cakes, gingerbread men<br>and Sandwiches. | Food and Nutrition<br>Smoothies<br>Fruit Kebabs | Food and Nutrition<br>Soup<br>Roasted vegetables Vs salad | Food and Nutrition Flatbreads Compare ways of cooking potato Pancake batter | Food and Nutriti<br>Tornato sauce for p<br>Fruit turnovers<br>Savoury scones |