**Subject routeway**

Subject: Design and Technology

1. Curriculum intent:

Our Design and Technology (DT) curriculum aims to give children the practical skills, knowledge, creativity and understanding they need to design, make and evaluate products which solve real and relevant problems. Children use their imagination and problem-solving skills to solve practical problems in different contexts, considering their own and others’ needs, wants and values. Children learn to work co-operatively in a team.

Starting in the Early Years, our curriculum provides rich opportunities to explore materials, tools, construction and modelling. Throughout the curriculum we ensure progression in the key DT skills of planning, making and refining a product or process. DT build upon and link with other relevant disciplines such as mathematics, science, computing, art and history. We encourage children to describe and discuss their own designs and those in the world around them.

Our Design and Technology curriculum lays the foundations for future study and the development of the practical skills including an introduction to basic sewing, cooking and woodwork.

1. Implementation

Our DT curriculum follows the National Curriculum and we use the *Kapow* Design and Technology scheme which has been carefully designed to ensure that pupils receive a broad and balanced DT curriculum covering all essential skills and knowledge. The scheme is based on the DT Association’s *Projects On A Page* programme, which reflects a high level of subject expertise in defining the areas to be covered. The scheme rotates over a 2-year cycle, giving children the opportunity to progress and consolidate their skills over 6 core areas of cooking and nutrition, mechanical systems, textiles, electrical systems, structures and digital world.

1. Milestones

The *Kapow* scheme sets out the skills and knowledge covered in each year group and strand across each unit of lessons. Techers use assessment for learning to monitor progress, modify their teaching and address skills gaps and misconceptions. There are clear expectations for every year group, setting out the skills needed including: generating ideas, using sketchbooks, design, building and evaluating, as well as the technical knowledge and substantive concepts which are needed to achieve the expected standard. Examples of all stages of the process for each project is recorded in the DT floorbooks, which then informs subsequent planning and delivery in the same and future year groups.

1. Inclusion

At Unity, we believe that education must develop every child’s talents and abilities (UNCRC art. 29), we therefore ensure that all children are able to fully participate in the Design and Technology process by assessing individual needs and putting into place strategies to support and scaffold full participation. This can include adapting the teacher input, providing additional adult support, carefully planned and monitored pair or group work, alternative materials or adapted tools. In some cases, we may adjust the task or outcome while ensuring every child gets the chance to be fully included and develop their full potential.

1. Professional development

Kapow includes extensive teacher support materials which have been well received by teachers and have increased teacher subject knowledge and confidence. Teachers work across and within year groups to develop their skills and subject knowledge. The DT lead offers support to adapt, plan and deliver for new or less confident staff members.

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