Curriculum Rationale: Design and Technology

Question	Response
What do we aim to achieve through the teaching of our subject?	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.
What are our learners entitled to?	We aim 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 for a wide range of users. • 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 and be competent in a range of cooking techniques
What building blocks are we trying to establish in preparation for further study?	• To realise learning and problem solving can be fun! • To develop lifelong interests and a passion for Design and Technology • Reflective & Resilience, to understand that making mistakes is part of the process. • Enthusiasm, Innovation & creativity in both designing and thinking. • Ability to work independently and as part of a team
How does the curriculum we teach reference our local contexts?	• We select projects and problems that are relevant to the children in our community. • We investigate social, cultural and environmental differences and use these as a starting point for project briefs. • Children will cook a variety of dishes from many different countries allowing them to sample different cuisines.
What skills do we seek to develop in our learners?	• To realise learning and problem solving can be fun! • To develop lifelong interests and a passion for Design and Technology • Reflective & Resilience, to understand that making mistakes is part of the process. • To develop responsible designers and consumers who could change the world around them. • An awareness and curiosity of the ever-changing technological world in which we live. • Enthusiasm, Innovation & creativity in both designing and thinking. • Ability to work independently and collaborate as part of a team. • To be able to select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. • Awareness of the importance of Health & Safety within the practical environments • Ability to use technological vocabulary with confidence
How our curriculum design is inclusive in respect to different: • **Ethnicities** • **Religions** • **Sexual Orientations** • **Genders**	We aim to encourage and support inclusion of these key areas through: • Raising awareness of different religious beliefs and practices in relation to diet, eating patterns and use of a range of materials. • Developing students' understanding and awareness of culturally diverse design, designers, and the influences of ethnicity on the designs created. • We encourage all to develop abilities in workshop, design studio and food room – we identify role models of all genders and sexual orientation in a variety of job roles.
How we enrich our students experience of our subject though additional or extra-curricular activities.	Various competitions throughout the year including Rotary Young Chef and The Warwick University STEM challenge. Open workshop and design studio space available to all KS4 and KS5 pupils at lunches, in KS5 free periods and after school with 1:1 teacher supervision.