

VISION FOR: Design and Technology

Children develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

PRINCIPLES AND RATIONALE

At Kobi Nazrul School, children 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. They understand and apply the principles of nutrition and learn how to cook. They are regularly provided with the opportunity to critique, evaluate and test their ideas and products and the work of others. As they evaluate past and present design and technology, they developing a critical understanding of its impact on daily life and the wider world.

Children 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 are encouraged to be creative and imaginative within these processes as well as take risks, becoming resourceful, innovative, enterprising and capable citizens. They make connections across different areas of learning over time

WORKING WITH AND THROUGH OUR KEY CURRICULUM CONCEPTS

Change

- Impact on daily life
- How has the technology changed the world/the way we live? How might things change in the future?
- Invention / creation of products changing the way we live
- How ingredients change when cooking. Are these changes always reversible?
- Testing and evaluating a product during the manufacturing process and changing it to work better
- How long does a product maintain its usefulness? Does its usefulness change over time?
- How has a product, for example a bicycle, changed over time? How have our needs affected these changes? What are similarities/differences between a penny farthing and a public bike?

Power

- What makes a product powerful? What is the difference between physical power and social power?
- Is there power in branding/advertising a product? What power does packaging have?
- How does a product empower the user?
- Who has the power for products commercially?
- Who has power when a product is being designed and made? Do some of the individuals have more power than others?
- Do products have an aesthetic power? How does this affect our opinion of a product?
- Do we have power over what goes into our diet? How can we have more power? Do you have more power if you buy fresh ingredients rather than a microwave meal?



Identity and Belonging

- Does the generation you identify change the products you use?
- Who identifies as a designer?
- Does having a certain product mean you belong to a certain group? Does having a bike make you a cyclist? Can you be a cyclist without owning a bike?
- Do people identify themselves by the products they use/own/make?

Equality and Equity

- Is there equality among the individuals involved in the design and manufacture of a product?
- Do products remove barriers to equality and justice? Which are the most effective?
- How does the design of a product support people with different needs?

Connections

- Applying different subject knowledge e.g. science, art, maths skills, measurement, ratio
- What is the connection between a product and a group of people/culture/religion etc.?
- How do we make connections between DT and other subjects? When designing a product, what other learning do we need? Do we need an understanding of healthy living (Science) to design a successful meal?

Legacy

- Impact on daily life
- How long does a product maintain its usefulness?
- Which famous designers/inventors do we know and consider important? Why? Do we still use their products?

EYFS - CYCLES A AND B (Please see separate EYFS Subject overview for further detail)	What skills do we want children to develop across topics in the EYFS? (Birth to 5 Matters, Ranges 4,5,6):
Creating with materials	<ul style="list-style-type: none"> • Use 3D and 2D structures to explore materials • Use various construction materials, e.g. joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces • Use tools for a purpose • Use their increasing knowledge and understanding of tools and materials to explore their interests and enquiries and develop their thinking
Being imaginative and Expressive	<ul style="list-style-type: none"> • Use everyday materials to explore, understand and represent their world – their ideas, interests and fascinations • Use available resources to create props • Choose particular colours and materials for their own imaginative purposes

