

Stukeley Federation Design and Technology – UKS2

Throughout the year the children will cover a variety of aspects of the design and technology curriculum to ensure all children:

- 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
- 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.

Autumn 2

Fair Trade

Developing, planning & communicating ideas

Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes.

Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.

Food & Nutrition

Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.

Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.

Evaluating processes & products

Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.

Evaluate their work both during and at the end of the assignment.

- Fair-Trade bread
- understanding seasons may affect food available
- knowing that food is grown & caught in the UK, Europe & the wider world
- understanding that food & drink can contain different substances

Spring 1	<p><u>Volcanoes</u></p> <p>Developing, planning & communicating ideas Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces. Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>Working with tools, equipment, materials and components to make quality products Confidently select appropriate tools, materials, components and techniques and use them. Use tools safely and accurately.</p> <p>Evaluating processes & products Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests. Evaluate their work both during and at the end of the assignment.</p> <ul style="list-style-type: none"> • Mechanical systems pulleys & levers (linked to science) • Gears and cams • understand how mechanical systems create movement • make a moveable object
Summer 1	<p><u>Ancient Greece</u></p> <p>Developing, planning & communicating ideas Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces. Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>Working with tools, equipment, materials and components to make quality products Confidently select appropriate tools, materials, components and techniques and use them. Use tools safely and accurately.</p> <p>Evaluating processes & products Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests. Evaluate their work both during and at the end of the assignment.</p> <ul style="list-style-type: none"> • <i>Design and create a key ring</i> • <i>Use Tinkercad on iPad</i> • <i>Use 3D printer</i>