Reception

Use the basic principles of a healthy and varied diet to prepare dishes.

Develops their own ideas through selecting and using materials and working on processes that interest them.

Use simple tools and techniques competently and appropriately.

Selects tools and technique needed to shape, assemble and join materials.

Can explain what they have made.

Year 1

Begin to discuss what healthy foods are and prepare food safely.

Understand where food comes from and give examples of food that is grown.

Use pictures and words to describe and create a simple design for a product.

Choose appropriate tools and resources to perform practical tasks—cutting, shaping joining and finishing.

Make a structure, exploring how it can be made stronger and more stable.

Make a product that moves using wheels and axles

Explore and ask simple questions about existing products and those that have been made.

Year 2

Understand the need for a variety of food in a diet and prepare food safely using a range of cookery techniques.

Understand that all food has to be farmed, grown or caught.

Design purposeful, functional, appealing products for others based on design criteria.

Generate, develop, model and communicate ideas through talking, drawing, templates and ICT.

Choose appropriate tools, equipment, techniques and materials to safely measure, mark out, cut and shape materials.

Investigate techniques for stiffening a variety of materials and explore different methods of enabling structures to remain stable.

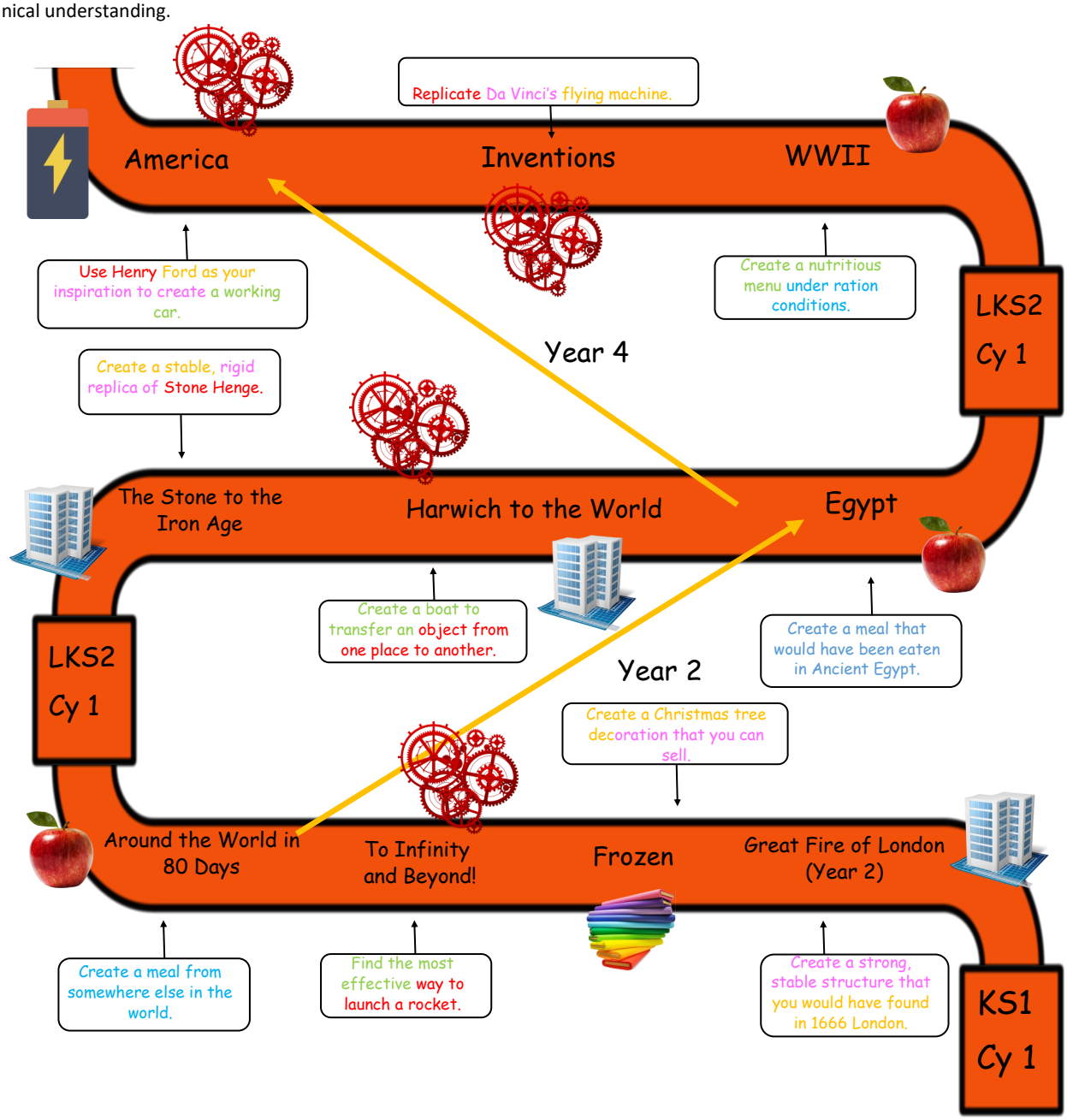
Explore and use mechanisms e.g. levers, sliders, wheels and axles.

Evaluate and assess existing products and those that have been made using a design criteria.

Cooking and nutrition Designing Skills, techniques and making Evaluating

Statement of intent for DT

Designers in this school will be independent, creative and imaginative thinkers. They will research and compare a range of products and inventions around the world to inform their designs. Through collaboration, children will learn to problem solve and articulate the successes of their designs using technical understanding.



Years 3 and 4

Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active.

Understand seasonality and the advantages of eating seasonal and locally produced food.

Read and follow recipes which involve several processes, skills and techniques.

Use knowledge of existing products to design a functional and appealing product for a particular purpose and audience.

Use knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them.

Apply techniques they have learnt to strengthen structures and explore their own ideas.

Understand and use electrical systems in products., switches, bulbs, buzzers and motors.

Consider how existing products and their own design might be improved and how well they meet the needs of the intended user.

Years 5 and 6

Confidently research, plan and prepare a series of healthy meals based on the principles of a healthy and varied diet, understanding how food is grown, reared, caught and processed.

Use information on food labels to inform choices.

Use research they have done into famous designers and inventors to inform the design of their own innovative products.

Generate, develop, model and communicate their ideas through discussion, annotated sketches, diagrams, prototypes and ICT.

Use technical knowledge to problem solve during the making process.

Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately,

Understand and use mechanical systems—gears, pulleys, cams,and levers.

Understand and use electrical systems—switches, bulbs, buzzers and motors.

Apply their understanding of computing to program, monitor and control their products.

Apply their knowledge of materials and techniques to refine and rework their product to improve its functional properties and aesthetic qualities.

Use their knowledge of famous designs to further explain the effectiveness of existing products and products they have made.

Textiles

Food and nutrition

Structures

Mechanics

Electrics

Create a structure to withstand a natural disaster.

Ancient Greeks

Natural Disasters

Vikings and Anglo-Saxons

Create a circuit to light up an Olympic torch.

Create a class Bayeux tapestry.

LKS2 Cy 2

Year 4

Design a catapult to throw a rock the furthest.

The Romans

Our Kings and Queens

Rainforests and Growth

Design a piece of clothing for an upcoming royal event.

Create a structure to withstand the weather of the rainforest.

LKS2 Cy 2

Year 2

Beside the Sea

Harwich to Haluabagalla

Dinosaurs

Great Fire of London (Year 2)

Build a lighthouse that can withstand a storm.

Create a seasonal fruit dish from both locations

Create a strong, stable structure that you would have found in 1666 London.

KS1 Cy 2