Design & Technology Progression Grid Class 4-5 cycle 1



Autumn – Juggling balls

Objectives-

To investigate and evaluate a range of existing products in the context of a product analysis of existing juggling balls.

To generate, develop, model and communicate ideas through discussion and annotated sketches in the context of designing a circus themed juggling ball.

To select from and use a range of tools and equipment to perform practical tasks accurately in the context of creating a tie-dye background for a juggling ball.

Spring – super seasonal cooking

Objectives

To understand the principles of nutrition and learn how to cook To instil a love of cooking in pupils

To be able to feed oneself and others affordably and well

To understand and apply the principles of a healthy and varied diet

To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Summer- Automato animals

Objectives-

To 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

To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]

To use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups

To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Minimum learning is highlighted

Minimum vocabulary is in bold

To investigate and evaluate juggling balls.

To follow a design criteria to help me create and communicate my ideas.

I know why **function** and design and **decoration** are important.

I know how to design to appeal to an audience

I can name 4 different **fabrics** which would be appropriate for juggling balls (eg cotton, paper, **felt**, plastic, polyester)

I can investigate a range of products

I can develop a design based on criteria

I can decorate fabric

I can create a hem and join fabrics. I know how to explain how to join fabrics

To know what the 4 seasons are

To know what the seasonal calendar is in terms of food

To know when cherries, pumpkins, parsnips, sprouts, blackberries and peas are in season.

To know the difference between a **fruit** and a **vegetable**

To know how to use the seasonal chart/calendar

To know some foods which are grown

To know some foods which are reared

To know some foods which are caught

To know some foods which are processed

I can explain food hygiene

To know **the rotation** part of the mechanism is a **Cam** and the **follower** is **the reciprocating motion** (back and forth).

To know what a cam and follower are

To make/assemble a cam and follower

To think about replicating animal movement

To cut materials accurately and safely by selecting appropriate tools To be able to evaluate their product