Design Technology - Medium term plan		
Year group: Year 4	Topic : Design Packaging	Focus : Strengthening structures

# Design

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

#### Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing],
   accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

#### **Evaluate**

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

# **Technical Knowledge**

• apply their understanding of how to strengthen, stiffen and reinforce more complex structures

#### Prior learning experiences from Y3

- **Design** create a design using design criteria
- Make make a that moves its mouth using pneumatics
- Make find ways of making wheels and an axle
- Evaluate Explain what they like and dislike, show how to improve their monster
- **Evaluate** identify key features of a moving model
- Technical knowledge create a mechanism using syringes and piping (pneumatics)

### **Endpoints for Y4**

- **Design** create a design using design criteria
- Make make packaging that is fit for purpose
- **Evaluate** use the design criteria to evaluate the product, identify areas for improvement and how to improve, both aesthetically and technically
- **Evaluate** identify key features of packaging for a range of products
- **Technical knowledge** make structures suitable for the product, use ICT to aid design

### Sticky Vocabulary

Design, design criteria, evaluate, product, strengthen, aesthetic, appropriate

Design	Make	Evaluate	Technical knowledge
Can start to generate ideas, considering the purposes for which they are designing Can confidently make labelled drawings from different views showing specific features. Can understand how well products have been designed, made, what materials have been used and the construction technique.	Can select a wider range of tools such as scissors, paper clips, glue and techniques Can measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.	Can start to evaluate their work both during and at the end of the process.  Be able to evaluate familiar products and consider the views of others to improve them.	Can strengthen structures to ensure it is fir for purpose. Can use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.