FENISCOWLES PRIMARY SCHOOL

Striving for Excellence

DESIGN TECHNOLOGY
YEAR 2 MODULE OVERVIEWS

Y2	Context	Design	Make	Evaluate	Technical Knowledge
Autumn	***Structures*** ***Baby Bear's chair*** Using the tale of Goldilocks and the Three Bears as inspiration, children help poor Baby Bear by making him a brand new chair. When designing the chair, they consider his needs and what he likes and explore ways of building it so that it is a strong and stable structure and doesn't break again!	Generating and communicating ideas using sketching and modelling Learning about different types of structures, found in the natural world and in everyday objects	Making a structure according to design criteria Creating joints and structures from paper/card and tape	Exploring the features of structures Comparing the stability of different shapes Testing the strength of own structures Identifying the weakest part of a structure Evaluating the strength, stiffness and stability of own structure	Identifying natural and man-made structures Identifying when a structure is more or less stable than another Knowing that shapes and structures with wide, flat bases or legs are the most stable Understanding that the shape of a structure affects its strength Using the vocabulary: strength, stiffness and stability Knowing that materials can be manipulated to improve strength and stiffness Building a strong and stiff structure by folding paper

Spring	***Mechanisms*** ***Fairground wheel*** This unit brings together the children's knowledge of structures and mechanisms. They design and create their own Ferris wheels, considering how the different components fit together so that their wheels rotate and their structures stand freely. Pupils select appropriate materials and develop their cutting and joining skills to create a final product.	Creating a class design criteria for a moving monster Designing a moving monster for a specific audience in accordance with a design criteria Selecting a suitable linkage system to produce the desired motions Designing a wheel Selecting appropriate materials based on their properties	Making linkages using card for levers and split pins for pivots Experimenting with linkages adjusting the widths, lengths and thicknesses of card used Cutting and assembling components neatly Selecting materials according to their characteristics Following a design brief	Evaluating own designs against design criteria Using peer feedback to modify a final design Evaluating different designs Testing and adapting a design	Learning that mechanisms are a collection of moving parts that work together in a machine Learning that there is an input and output in a mechanism Identifying mechanisms in everyday objects Learning that a lever is something that turns on a pivot Learning that a linkage is a system of levers that are connected by pivots Exploring wheel mechanisms Learning how axels help wheels to move a vehicle
Summer	***Mechanisms*** ***Making a moving monster*** After learning the terms; pivot, lever and linkage, children set to designing a monster that will move using a linkage mechanism. After practicing making linkages of different types and varying the materials they use, children can also bring their monster to life with the gift of movement.				