

Year 2 - Summer - Design & Technology Knowledge Organiser

What I already know...

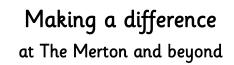
- Understand how simple 3-D textile products are made, using a template to create two identical shapes.
- Know that some materials are stronger and more rigid (stiffer) than others e.g. thick card is stronger and more rigid than paper.

What I will learn...

- •To know that a structure is something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair)
- •To understand the importance of strength and stability when designing and creating a structure with a function.
- •To know how to research for design ideas in real life (trip to zoo)

Key Vocabulary

Structure	Something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair)
Function	How something works
Man-made	Made by people
Stable	Object does not easily topple over
Stiff	A material or object that does not bend easily (e.g. wood)
Strong	Something that is not easily broken (e.g. wood, brick, building
Test	To find out whether something works as it should
Weak	Something that is easily broken (e.g. paper, egg shells)



Using our "Explorers" theme as inspiration, the children will learn how to create a stable and strong free standing structure: Climbing apparatus for a monkey! We will research what Twycross Zoo already has to entertain the monkeys on our trip to help us to design a functional product. They will create their prototype structure using a range of materials (sticks, string, cardboard tubes, straws) and consider how to attach it together when testing the strength of their creation.

How to be a designer...

- •Generating and communicating ideas using sketching and modelling.
- Using real life research to create our own designs.
- Making a structure according to a design criteria.
- Testing the strength and stability of own structures.

