

KS1: Prototypes- Playground Equipment

Key Vocabulary

Model	A representation of a real object.
User	The person using the end product.
Aesthetics	What something looks like
Purpose	The reason why something is made and how this changes depending on who it is created for
Strong	A structure that can support itself
Safe	Something that is not likely to cause injury and doesn't involve danger or risk

Research

Some designers incorporate art into their playground equipment.



Monstrum Playgrounds



Play sculptures by Pieter Kortekaas

Designers

Key Research Questions

What are the **purposes** of most playground designs?

How do these pieces of equipment exercise the body **effectively**?

How do they make sure that their equipment are **safe** to use?

Why would children want to play on these pieces of equipment? Think about **interesting design and aesthetics**.

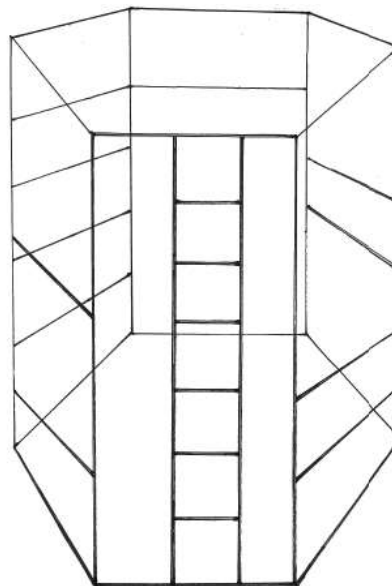
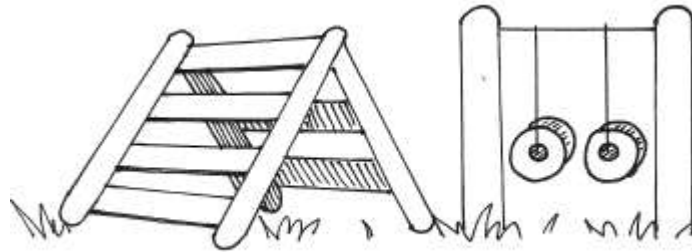
The Project

Introduction

This project is designed to introduce you to prototyping, a type of design where you make small models of larger things. In this case what you would find in the playground

Purpose for Project

To design a new piece of playground equipment that will help a child in living a healthy lifestyle by exercising different parts of their body.



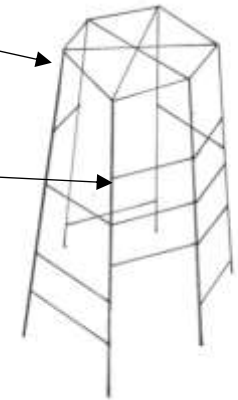
Design

In your design you will need to draw what you are proposing to make and label what muscles or parts of the body your design is exercising. Use your research of play ground equipment to help you.

Label what material you will be using for each of your designs:

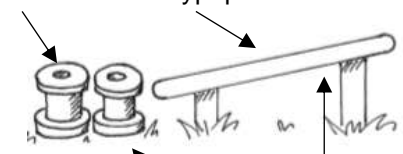
Art Straws

Children will exercise their arms by pulling themselves up the bars.



Cotton reels

lollipop sticks



Children will be using their core muscles (chest) and leg muscles to help with balance.

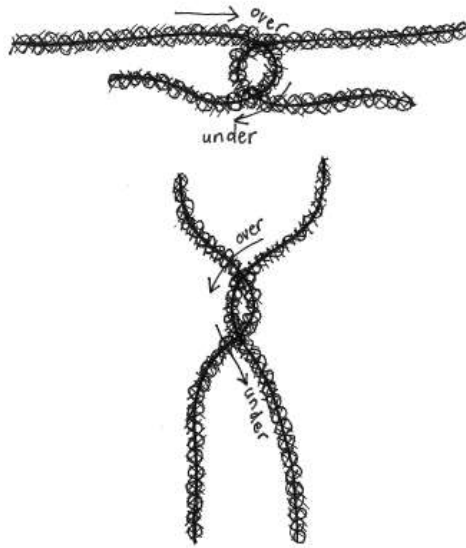
Labelling

Make

Using pipe cleaners

Pipe cleaners can be joined together by twisting one pipe cleaner under another.

Pipe cleaners are useful in creating intricate patterns, especially for climbing frames and swings

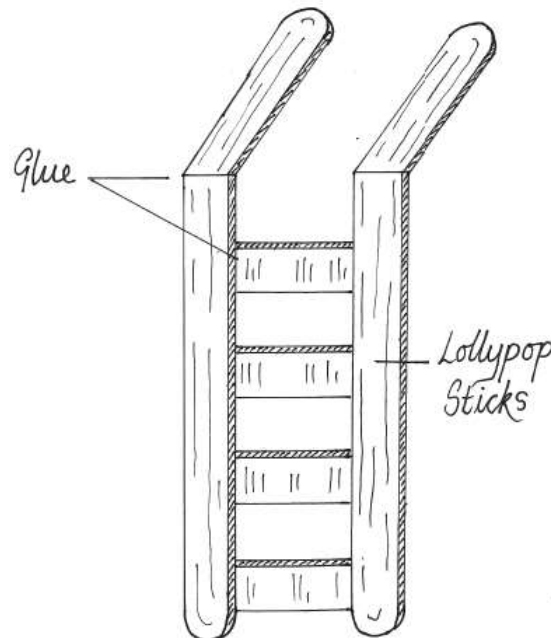


Using Lollypop Sticks

Lollypop sticks are a strong and stable, useful in creating ladders and climbing frames.

To create a ladder:

1. Use two lollypop sticks to create your vertical frame.
2. Cut a lollypop stick in half and use PVA glue to stick them together to make rungs.



Evaluate

You will learn how to

Use your own opinion to decide if you like your project and why

Use some the design criteria, based on your research and designs, to think how successful you have been.

Begin considering what you could have changed based on your on design criteria