

# Newquay Primary Academy – Autumn Term 2 Sequence – Design & Technology



## RECEPTION

### *Attaching – The Naughty Bus*

**Prior knowledge...** Children have explored how cars move.

## YEAR 1

## YEAR 2

### **Mechanisms: Fairground wheel**

**Prior knowledge...** Children have learned about wheels, axles and axle holders work.

## INTENT

Use one handed tools and equipment successfully (PD). Explore materials freely, join materials together, develop their own ideas and creations (EAD).

Design and create a functional Ferris Wheel, learn how different components fit together so that the wheel rotates and the structure stands freely.

## VOCABULARY / STICKY KNOWLEDGE

Stick, cut, press, join, pinch, roll, knead, stretch, squeeze, twist, thread, rotate, combine, equipment, design, wheel

Design, design criteria, wheel, Ferris Wheel, pods, axle, axle holder, frame, mechanism

## SEQUENCE OF LESSONS

1. Use a variety of tools and attaching techniques to create a vehicle.
2. To identify different vehicles.
3. To create a vehicle using junk modelling, attaching 4 wheels.
4. Explore how cars roll and move using guttering and roads.

1. To explore wheel mechanisms and design a wheel.
2. To select appropriate materials.
3. To build and test a moving wheel.
4. To make and evaluate a structure with a rotating wheel

## OUTCOME / COMPOSITE

To design a naughty bus using a variety of materials, using the correct shape to make the wheels.

To design, make and evaluate a functional Ferris wheel.