

## Year 5 Summer 2 Project overview— All the Fun at the Fair

### **Big Idea: Fairgrounds - how do they capture the imagination?**

Become **design engineers** and fulfil your **design brief** to **design** and **make** your very own working fairground ride for 7-11 year olds to enjoy. Carry out **market and product research** to hone your designs and use opportunities to **change** and **adapt** to ensure they best meet your **specifications**.

**HOOK:** Paultons Park - What is a theme park?

**OUTCOME:** Theme park 'mini world' creation - shared with target market.

### **Applied Literacy:**

*Information page* - Roller coasters through time - impact of technology.

*Historical conclusion* - Why have fairs changed over time?

*Persuasive writing* - Advertising final ride design - persuading 7-11 year olds to try it out!

### **Applied Mathematics:**

Measure - accurate measure to nearest mm applied in DT making session.

### **Pupil Premium Curriculum Enhancement:**

Science fair/talk from scientists about their role in jobs including creation of rollercoasters.

### **Key Concept Design Technology - Mechanisms**

- children will **research** existing, and historical, rides and **evaluate** what makes them successful and use these ideas to inspire their own **designs**.
- know the role of **mechanisms** - how Use a **Cam system** to make an up and down mechanism, To use **gears** and **pulley systems** in designs.
- learn how to **cut** wood **accurately**
- children will begin to create **technical designs** including zoom elements that include **mechanisms** that will make their design **functional**.
- **Evaluate** and adjust designs after **consumer feedback**

### **History: Technology**

- reflect on the **history of engineering** and draw **conclusions** on the impact it has had on fairs through time.
- **Analyse** a range of **sources** to understand key differences between fairs of the Victorian **era** and fairs today.

### **Science: Physics - Forces Enquiry: Secondary sources and fair testing**

- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect

**Music: Composition** Children develop their compositional skills, particularly notation of melodies, to create their own jingle to advertise their rides.

### **SMSC and Learning Values:**

**Moral**– Ethics and difference - how focus of fairs changed as societies opinions changed (curiosities at Victorian fairs).

**Community**— purpose of fairs and role in communities/day to day life. Enjoyment a s

### **Community links/ Enterprise/ Experiences:**

Paultons Park trip - children attend a scientific workshop to hook learning into forces and mechanisms at work on rides.

Theme park creation - children create their own theme park with miniature working rides fo

# SJS Design Engineers

*Big Idea: Fairgrounds -  
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## What I already know...

How to design for a **target market**. (Y3- Smoothies)

How to select appropriate methods to **join** materials well. (Y3 - Torch design)

To include a **Zoom element** in my design to show smaller details. (Y4 - Clothing - sewing)

How to **evaluate** final products against my **design specifications**. (Y4 - Rags to Riches)

## ALL THE FUN OF THE FAIR



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# Key concept: Mechanisms

## I will learn...

- ☐ To use **product research** to inspire design ideas.
- ☐ To use a **target market feedback** to create a **specification**.
- ☐ To draw a working **design** from **different angles** and include **zoom element**.
- ☐ To **strengthen joins**.
- ☐ To design and create a ride that uses a **force, rise and fall motion** or a **friction stop**.

Mechanism

Strengthen

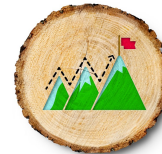
Target  
Market

Aesthetics

Specification

Product  
research

## Our Personal Skills:



# SJS Historians

*Big Idea: Fairgrounds -  
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## What I already know...

*How to sequence events on a timeline  
using chronological knowledge. (Y3-  
Egyptians, Y4- Romans, Y5- Saxons and  
Vikings)*

*Understand similarities and differences  
between their own lives and others in  
different periods. (Y3- Egyptians, Y4-  
Romans)*

*Understand that key events in history  
have a cause and consequence. (Y5-  
Saxons and Vikings)*

*Understanding the importance of sources  
within history and the uses of them. (Y3-  
Egyptians, Y4- Romans, Y5- Saxons and  
Vikings)*



Go back in time and explore why fairs have changed throughout time. Use sources to uncover the history of a much loved pastime and take a look behind the curtain at the darker past of fairground entertainment.

# Key concept: Technology

## I will learn...

- ☐ About the origins of fairs
- ☐ How the development of science and engineering impacted fairs.
- ☐ The impact that ethics and human rights had on the entertainment industry.
- ☐ Why fairs were popular throughout time.
- ☐ Why fairs remain popular today.

## Key Vocabulary:

decade

impact

engineering

develop

ethics

industrial

## Our Personal Skills:

