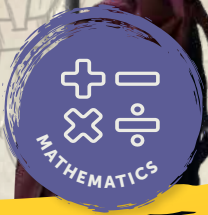




UNREAL EXCURSIONS

PROGRAM OVERVIEW FOR TEACHERS

DESIGN A THRILL RIDE ENGINEERING AT AUSSIE WORLD





DESIGN A THRILL RIDE

ENGINEERING AT AUSSIE WORLD

Program Overview:

Aussie World's 'Design a Thrill Ride' engineering challenge invites students to step into the role of theme park engineers. Using real rides as inspiration, students investigate how forces, materials, safety features and design choices work together to create thrilling but safe experiences.

In this self-guided activity, teachers supervise groups of students as they rotate through four investigation stations where they observe rides, analyse structures, explore materials and apply engineering thinking before designing their own ride.

This program supports the Australian Curriculum by connecting engineering design processes to real-world theme park systems in an engaging and hands-on environment.

What students will explore:

At four investigation stations, students will investigate:

- Thrill Ride Observation (Viewing Only)
- Identify features that create excitement
- Observe height, speed, drops and motion
- Family Ride Investigation
- Compare gentle vs thrill ride design
- Explore safety and controlled motion
- Materials and Structures Station
- Investigate why different materials are used in rides
- Examine strength, flexibility and support structures
- Design Challenge Zone
- Apply learning to design an original ride
- Consider forces, materials and rider experience

Each station includes structured tasks for observation, recording, reasoning and design thinking.

Curriculum Alignment:

This program aligns with the Australian Curriculum Version 9.0 across Science, Technologies and Mathematics

Science

Students explore:

- Forces and motion, including how pushes and pulls affect movement in rides
- Material properties and how they influence strength, flexibility and use
- Scientific inquiry through observation, questioning and explanation

Technologies

Students explore:

- Investigate how engineered systems (rides) are designed for function and safety
- Apply the engineering design process to create their own ride solutions
- Consider materials, structure and user experience in design decisions

Mathematics

Students explore:

- Compare features such as height, speed and movement
- Use estimation and informal measurement in real-world contexts
- Collect and interpret observations to support reasoning

General Capabilities

This program supports:

- Critical and creative thinking
- Numeracy
- Problem-solving through real-world design challenges

This program is designed to support Science Understanding, Science Inquiry Skills and Design and Technologies across Grades 3 – 6 in the Australian Curriculum Version 9.0, through engaging real-world STEM learning experiences.