AUSSIE WORLD

UNREAL EXCURSIONS

PROGRAM OVERVIEW FOR TEACHERS

HOW THEME PARKS WORK

SYSTEMS AND SUSTAINABILITY

AUSTRALIAN CURRICULUM ALIGNED

HANDS-ON LEARNING

ENGAGING AND FUN

SAFE AND EDUCATIONAL

HOW THEME PARKS WORK

SYSTEMS AND SUSTAINABILITY

Program Overview:

Aussie World's **'How Theme Parks Work: Systems and Sustainability'** program introduces students to the science, technology and engineering behind how theme parks operate efficiently and responsibly.

In this self-guided activity, teachers supervise groups of students as they explore how rides function as systems, how energy and materials are used throughout the park and how sustainability practices help reduce environmental impacts. Through real-world observation and hands-on investigation, students develop an understanding of how science, technology, engineering and design work together in a modern theme park.

Students look beyond the rides to investigate the interconnected systems that help Aussie World operate every day, including energy use, materials, sustainability initiatives, waste management, food services and visitor facilities. They explore how people, resources and technology work together to create safe, enjoyable and environmentally responsible experiences for guests.

Through four investigation stations, students examine theme park systems, analyse energy use, investigate materials and sustainability and apply their learning through a sustainable design challenge. This learning experience is carefully designed to support the Australian Curriculum, providing engaging, curriculum-aligned learning that connects real-world contexts to classroom learning.

What students will explore:

At four investigation stations, students will investigate:

- Theme Park Systems
- Investigate how rides, services and facilities operate as interconnected systems
- Identify inputs, processes and outputs within real-world theme park systems
- Explore how people, technology and resources work together

- Energy and Efficiency
- Explore how energy is used throughout the theme park
- Investigate energy transfers in rides and attractions
- Consider ways businesses can reduce energy use and improve efficiency

- Materials and Sustainability
- Investigate materials used in rides, buildings and park infrastructure
- Explore durability, recycling and environmental impacts
- Identify sustainability practices used in real-world settings

- Sustainable Design Challenge
- Design a theme park attraction that is exciting and environmentally responsible
- Consider safety, energy use, materials and visitor experience
- Apply engineering and sustainability principles to solve problems

Curriculum Alignment:

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

Science

Students explore:

- Systems and how components work together to perform a function
- Energy use, transfer and efficiency in real-world contexts
- Properties of materials and their sustainability for different purposes
- Scientific inquiry through observation, investigation and explanation

Technologies

Students explore:

- Investigate designed solutions and engineering systems used in theme parks
- Analyse how inputs, processes and outputs contribute to system performance
- Apply design thinking to create sustainable and functional ride concepts
- Consider safety, sustainability and user needs in design decisions

Mathematics

Students explore:

- Collect, record and interpret observational data
- Compare and classify materials based on their properties
- Estimate and analyse energy use efficiently
- Apply measurement, spatial reasoning and problem-solving skills

General Capabilities

This program supports:

- Critical and creative thinking
- Problem solving in real-world contexts
- Ethical understanding through sustainability considerations
- Personal and social capability through collaborative investigations

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 focused on systems, sustainability and engineering design.