There are six types of simple machines

**Marvellous Machines**

During this unit students will participate in hands-on activities to explore six types of machines: levers, wheels and axles, pulleys, inclined planes, wedges and screws. Students will investigate how they work and will identify these components in simple, real-life machines they can find at school and at home. They will explore concepts of force and movement and the relationship between energy, force and movement. They will investigate how changes and advances in machines have impacted on people’s lives.

**Learning at Home Ideas**

What simple machines can you find at home? What do you use these machines for?

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**Big Question**

How do people use science knowledge and technological processes to meet their needs?

**Big Ideas**

Systems, energy, change, force and movement.

**Learning Intentions:**

**We are learning that:**

A machine is a tool to make work easier and simple machines are simple tools.

There are six types of different simple machines

Forces (pushes or pulls) affect how objects move.

**We are learning to:**

- Identify and generate questions that can be investigated scientifically and predict what might happen.
- Suggest ways to plan and conduct investigations to find answers to questions.
- Safely use appropriate materials, tools or equipment to make and record observations, using formal measurements and digital technologies.
- Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends.
- Compare results with predictions, suggesting possible reasons for findings.
- Reflect on the investigation, including whether a test was fair or not.
- Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports.
Literacy

Speaking and Listening
We are learning to:
- discuss texts in which characters, events and settings are portrayed in different ways.
- plan and deliver a short presentation about simple machines.

Reading
We are learning to:
- Identify the text structures and language features of procedural, explanation and descriptive texts.
- Make connections between the text and our own experiences and experiences with other texts.
- Make valid inferences using information in a text and our prior knowledge
- Read aloud with fluency and expression
- Read a wide range of different types of texts for pleasure
- To recognise high frequency sight words (becoming familiar with most high-frequency sight words)
- Respond in a variety of ways to literature.

Writing
We are learning to:
- Write predictions, observations, and explanations.
- Write description of the characteristics of simple machines.
- understand that paragraphs are a key organisational feature of written texts
- create literary texts that explore our experiences and imagining.

Mathematics

Number:
We are learning about:
Addition and Subtraction
Multiplication

Measurement:
We are learning about:
2D and 3D shapes.

Data and Graphing:
We are learning about:
Generate questions
Collect data
Display Data
Interpret Data

Religious Education:
- Eucharist: celebrating Jesus’ presence
- Stories of God’s People

Art: Art with Simple Machines

Library: Reading and responding to Book Week Literature

PE: Bluearth