Green Museum Project EDUCATION KIT



Echuca Historical Society

Green Museum Project

As part of the Green Museum Project 2016-2017, the Echuca Historical Society had a 4kW solar panel system installed. This new solar system has resulted in a 50 per cent reduction in annual carbon emissions and a \$1,500 reduction in annual energy costs for the society.

(Upper Primary) Activity: How can understanding history help us understand the environment?

Requirements: paper and pencil

The Echuca Historical Society has a number of different collection items and information about Echuca's past that can help us to better understand the unique environmental conditions of this area.

Moreton Bay Fig Trees:

You might have noticed two big trees outside the front of the Historical Society building when you first entered. These trees are called Moreton Bay Fig trees and the society estimates that they were planted here sometime between the years 1875 and 1880. The scientific name for this tree is *Ficus macrophylla* and it is native to the east coast of Australia. These particular trees were planted from seeds provided by William Guilfoyle, who was the curator of the Royal Botanical Gardens in Melbourne from 1870 to 1909.

- Approximately how old are the fig trees today?
- What is the difference between native and introduced plant species? Why might one be better than the other?

In the box below sketch what the trees look like today:

Joseph Guilfoyle

Joseph Guilfoyle was the brother of William Guilfoyle, who provided the seeds for the Moreton Bay Fig trees out the front of the museum. Like William, Joseph was also interested in plants, and worked as a forest ranger in the Echuca-Moama area.

See what information you can find out about Joseph Guilfoyle and his brother William as you tour around the displays today. Write your notes below:

Extreme weather events

Water is a very important resource, especially in Echuca. Historically, the Murray River has played a huge role in the survival of the town. Have a look at the **River Trade timeline** and in small groups, discuss some of the ways the river was an important element for the town of Echuca. Can you think of any other ways the residents might have benefited from the river that are not listed on the timeline?

Flooding has been a frequent event in Echuca's history. Have a look at some of the historic photographs of flooding that are displayed in the museum today. In groups discuss the following questions:

- What causes flooding?
- What are some of the consequences of flooding?

Extreme heat, drought, storms, cyclones and flooding are just some of the extreme weather situations that are becoming increasingly common as a result of climate change. We can use historic information from the past to investigate changes to our climate and weather patterns.

The Bureau of Meteorology has lots of historic weather statistics available on their website. When you get back to school or home, you might like to have a look at some of the statistics for your local area.

Examine the graph of rainfall in Echuca over the past 130 years and in pairs or groups of three answer the following questions:

- What year had the lowest rainfall?
- What year had the highest rainfall?
- If you were looking for years of potential flooding, which years would you pick for further investigation based on this rainfall chart?

Share your answers with the rest of your group.



meta-chart.com

Rainfall in Echuca 1881-2011

www.mavic.asn.au

Victorian Curriculum Victorian Curriculum

Critical and Creative Thinking: Levels 5 and 6

Questions and Possibilities:

- Examine how different kinds of questions can be used to identify and clarify information, ideas and possibilities (VCCCTQ021)
- Experiment with alternative ideas and actions by setting preconceptions to one side (VCCCTQ022)
- Identify and form links and patterns from multiple information sources to generate non-routine ideas and possibilities (VCCCTQ023)

Geographical Concepts and Skills: Level 5 and 6

Place, Space and Interconnection

- Identify and describe locations and describe and explain spatial distributions and patters (VCGGC086)
- Describe and explain interconnections within places and between places, and the effects of these interconnections (VCGGC087)

Data and Information

 Interpret maps and other geographical data and information using digital and spatial technologies as appropriate, to develop identifications, descriptions, explanations and conclusions that use geographical terminology (VCGGC090)

Geographical Knowledge

- Impacts of bushfires or floods on environments and communities, and how people can respond (VCGGK095)
- Environmental and human influences on the location and characteristics of places and the management of spaces within them (VCGGK096)
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History: Levels 5 and 6

Historical sources as evidence:

- Identify the origin, content features and the purpose of historical sources and describe the context of these sources when explaining daily life in colonial Australia, reasons for migration and causes and effects of Federation (VCHHC083)
- Describe perspectives and identify ideas, beliefs and values of people and groups in the past (VCHHC084)