LIFE ON THE MURRAY RIVER

Level: 5 & 6
Activity: 1

Overview
The Murray River is a rich part of the Australian landscape. It flows for more than 2,500km, through three states. Throughout history, the Murray River has been a source of food, trade and life sustaining biodiversity. During this activity, students will investigate the importance of the Murray River from the perspective of the people, both past and present. They will use poetry to describe these different perspectives.

Resources
• Smartboard or projector
• Appendix A: Types of Poetry (if needed)

Activity
ENGAGE
Discuss the importance of the Murray River:
• Who has used the Murray River in the past? For what?
• Who uses the Murray River today? For what?
• How is the river being cared for?
• Do you know of any current issues regarding the Murray River?

EXPLORE
Students will need to set up a page in their workbooks. They need to divide the page into two sections, titled PAST and PRESENT. Explain that while they watch the video, students should note down any interesting language that they hear that describes the importance of the river, including how it is used and cared for. They should sort these words into two categories PAST and PRESENT. Together, watch the River Kids video.

EXPLAIN
After the video, give students a few minutes to add to their wordlists. Explain to the students that we are looking for emotive language (language that provokes an emotional responses) to use in poetry. Encourage students to be ambitious with their choice of vocabulary. As a group, share some of the language chosen. Explain that students will now write a poem that explores our relationship with the Murray River, both in the past and today. Explain that there are many different forms of poetry. You might like to look at Appendix A: Types of Poetry together or simply allow the students to experiment and be creative.

ELABORATE
Give students time to write their poems, encouraging them to re-read aloud to check the rhythm and tone. Afterwards, students may like to decide how their poems could be shared (e.g. Newsletter, assembly, school website/student blogs, work portfolios etc).

EVALUATE
Discuss:
• How has the relationship changed between the people and the river?
• Have these changes affected the health of the river? In what ways?
## Curriculum Links

### Victorian Curriculum

<table>
<thead>
<tr>
<th>Level</th>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 5</strong></td>
<td><strong>ENGLISH</strong></td>
<td><strong>Reading:</strong> Examining literature Understand, interpret and experiment with sound devices and imagery, including simile, metaphor and personification, in narratives, shape poetry, songs, anthems and odes <em>(VCELT316)</em></td>
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<tr>
<td></td>
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<td><strong>Writing:</strong> Creating texts Plan, draft and publish imaginative, informative and persuasive print and multimodal texts, choosing text structures, language features, images and sound appropriate to purpose and audience <em>(VCELY329)</em></td>
</tr>
<tr>
<td></td>
<td><strong>HISTORY</strong></td>
<td><strong>Historical Concepts and Skills:</strong> Historical sources as evidence Describe perspectives and identify ideas, beliefs and values of people and groups in the past <em>(VCHHC084)</em></td>
</tr>
<tr>
<td></td>
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<td><strong>Historical Concepts and Skills:</strong> Continuity and change Identify and describe patterns of continuity and change in daily life for Aboriginal and Torres Strait Islander peoples, ‘native born’ and migrants in the Australian colonies <em>(VCHHC085)</em></td>
</tr>
<tr>
<td><strong>Level 6</strong></td>
<td><strong>ENGLISH</strong></td>
<td><strong>Reading:</strong> Examining literature Identify the relationship between words, sounds, imagery and language patterns in narratives and poetry such as ballads, limericks and free verse <em>(VCELT344)</em></td>
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<td><strong>Writing:</strong> Creating texts Plan, draft and publish imaginative, informative and persuasive texts, choosing and experimenting with text structures, language features, images and digital resources appropriate to purpose and audience <em>(VCELY358)</em></td>
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Sample Report Comments
{Name} has developed an understanding of the importance of the Murray River from the perspective of the people, both past and present.

{Name} understands that structure, rhythm and tone are important when writing poetry. {He/She} experimented with emotive language to create a poem about the Murray River.

References
Appendix A

Types of Poetry

Poetry is a very creative form of literature and it comes in lots of different shapes and sizes. When writing a poem, it is important to consider the structure, rhythm and tone. Below are some examples of different types of poetry.

<table>
<thead>
<tr>
<th>Couplet Poetry</th>
<th>Shape Poetry</th>
</tr>
</thead>
<tbody>
<tr>
<td>A poem that is made up of couplets. Couplets are pairs of lines that rhyme and have the same or similar number of syllables.</td>
<td>A poem that describes something, written in the shape of that thing.</td>
</tr>
<tr>
<td>e.g. Playing with friends is such great fun, We sing, we dance, we jump, we run.</td>
<td>Shiny</td>
</tr>
<tr>
<td></td>
<td>Bright and clear</td>
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<tr>
<td></td>
<td>Sparkles in the sunlight</td>
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<tr>
<td></td>
<td>Precious diamond</td>
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<tr>
<td></td>
<td>Gem</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Haiku</th>
<th>Acrostic</th>
</tr>
</thead>
<tbody>
<tr>
<td>A three-line poem, where the first and last lines have five syllables and the middle line has seven syllables. They do not need to rhyme.</td>
<td>A poem where the first letter of each line spells out a word or phrase</td>
</tr>
<tr>
<td>e.g. Gliding through the air Singing a beautiful song Then, home to my nest</td>
<td>e.g. Sunny, bright days Playing outdoors Riding bikes Ice-creams! No more cold weather Gorgeous flowers</td>
</tr>
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<table>
<thead>
<tr>
<th>Limerick</th>
<th>Free Verse</th>
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<td>A five-line poem, often humorous, written in an AABBA structure, meaning that there are two couplets and a final line that rhymes with, and has the same number of syllables as, the first two lines.</td>
<td>A poem that conveys feelings or ideas. It has no set rhythm or structure and usually does not rhyme.</td>
</tr>
<tr>
<td>e.g. I always wear my shoes with care, Because they are my favourite pair. My Mum says she won’t buy me more, Because I wrecked my other four. Unlucky, but I guess that’s fair!</td>
<td>e.g. Scared, cold and alone, I trudge slowly on. The trees whisper their secrets, As I reflect on my own. Lost.</td>
</tr>
</tbody>
</table>
LIFE ON THE MURRAY RIVER

Level: 5 & 6
Activity: 2

Overview
The Murray River is an amazing resource that has helped sustain life for tens of thousands of years. It is now up to us to make sure that the Murray River stays healthy and flowing for many years to come. Erosion of river banks is one issue that can greatly affect the health of the river. During this activity, students will model erosion using materials from the natural environment. They will investigate common causes and possible ways to combat erosion.

Resources
- Computer access for students
- Shallow plastic containers (one for each group of 3-4 students)
- Collection of natural materials, such as rocks, twigs, dirt, sand etc (students could collect these themselves during the lesson)
- Jug or watering can for each group
- Camera or other device for filming

Activity
ENGAGE
Ask students to close their eyes and imagine the Murray River. Ask:
- What plants/animals might we find beneath the water?
- What else might be hiding beneath the water?

Now ask them to picture the river bank, imagining that they have x-ray vision. Ask:
- What plants/animals might be hiding beneath the earth?
- What is the riverbank made of? (e.g. Loose rocks, tight-packed earth, clay etc.)

EXPLORE
Take students outside to an appropriate area and organise them into small groups of 3-4 students. Give the groups an opportunity to collect materials from the natural environment to use when constructing a model river bed (e.g. soil, rocks, twigs, leaves etc). Groups can now build their river bed inside a shallow, transparent, plastic container. Using a watering can or jug, students can slowly pour water along their riverbed. They should document what happens by taking photos or time lapse video.

EXPLAIN
Explain to students that this geological process is called erosion. As a whole class discuss:
- What did you notice?
- How long might this process take in real life?
- How did the composition of your riverbed affect the way it eroded?
- How did the movement of the water affect the way it eroded?
- Are there other factors that might affect this process?
- How can we stay safe around river banks that may have been affected by erosion? What do we need to consider before entering the water in these areas? (Answers may include: Reading safety signs, staying away from crumbling edges, using recommended access points, checking the water for submerged obstacles, etc.)
ELABORATE
Give small groups time to investigate erosion further. They will then need to combine their photos/video, together with their research, to create a visual presentation specifically about erosion along the Murray River. They will need to consider the following:

• What are the common causes of riverbank erosion?
• How does erosion affect the health of the river?
• How is erosion being addressed along the Murray River?

EVALUATE
Invite each group to present their findings. Discuss as a whole group:

• What is something that you have learnt?
• Why is it important to maintain the health of our waterways?
• How could we help?
## Curriculum Links

### Victorian Curriculum

<table>
<thead>
<tr>
<th>Level 5</th>
<th>Geography Knowledge: Factors that shapes places and influence interconnections</th>
<th>Environmental and human influences on the location and characteristics of places and the management of spaces within them (<a href="#">VCGGK096</a>)</th>
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<tbody>
<tr>
<td>Level 6</td>
<td>Geography Knowledge: Factors that shapes places and influence interconnections</td>
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### Sample Report Comments

{Name} used natural materials to model the geological process of erosion. (He/She) can describe this process in simple terms of cause and effect.

{Name} has investigated the issue of erosion along the Murray River. (He/She) can describe some of the natural and man-made causes, as well as strategies that are being used to combat this issue.
LIFE ON THE MURRAY RIVER

Level: 5 & 6
Activity: 3

Overview
The Murray River supports over 350 types of bird species and many other types of animals. Every species within this ecosystem is vital for its survival, unfortunately many species are currently under threat. During this activity, students will choose a native animal to investigate and create an ad campaign for its protection.

Resources
- Smartboard or projector
- Computer access for students
- Appendix A: Fact File (one copy per student)

Activity
ENGAGE
In pairs, students have 15 minutes to research animal and plants that can be found along the Murray River. They need to record these in their workbooks under two headings; Native and Introduced. Students should also use different coloured pens to show the conservation status of each animal (e.g. Red for extinct, orange for endangered, etc).

EXPLORE
With their partner, students now need to choose one of the animals from their Native list that is currently threatened or endangered. Give each pair a copy of Appendix A: Fact File. They now need to research their chosen creature and complete the Fact File.

EXPLAIN
Pairs now report back to the class about which animal they chose, sharing a few interesting facts and explaining what the biggest threats are to its survival.

ELABORATE
Students will now work with their partner to create an ad campaign for the protection of their chosen animal. They may choose what format their ad will take (e.g. Radio (audio only), TV (video) or Print (poster)). Every ad must address the following:
- Why the species is important to the ecosystem
- What the threats are
- How people can help

EVALUATE
Give students an opportunity to view or listen to the completed ads. Ask students:
- Which ads were the most effective? Why?
- What are the most common threats to animals along the Murray River? Are they mostly natural or man-made?
- Is there any further action we could take?
Curriculum Links

Victorian Curriculum

<table>
<thead>
<tr>
<th>Level 5</th>
<th>SCIENCE</th>
<th>Science Understanding: Biological Sciences</th>
<th>Living things have structural features and adaptations that help them to survive in their environment (VCSSU074)</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>The growth and survival of living things are affected by the physical conditions of their environment (VCSSU075)</td>
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<th>SCIENCE</th>
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<th>Living things have structural features and adaptations that help them to survive in their environment (VCSSU074)</th>
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<td></td>
<td></td>
<td>The growth and survival of living things are affected by the physical conditions of their environment (VCSSU075)</td>
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</table>

Sample Report Comments

{Name} investigated animals that are native to the Murray River region. (He/She) chose {Animal}, which is currently threatened/endangered, to research further. (Name) identified current threats to its survival and worked together with a partner to create an engaging and persuasive ad campaign for its protection.
LIFE ON THE MURRAY RIVER

Level: 5 & 6
Activity: 4

Overview
Aboriginal Australians are believed to be one of the oldest populations on Earth. Before British colonisation in 1788 there were over 500 different clan groups or ‘nations’ on the continent of Australia, many with distinctive cultures, beliefs and languages. During this lesson, students will investigate what Australia’s history looks like in visual form by creating a timeline to scale. They will find out about some of the most important events/information from across this whole period. They will reflect on the sheer magnitude of time that the Aboriginal people have been on this continent.

Resources
- Masking tape
- Tape measure
- Post-it notes
- Computer access for students
- Appendix A: Metric Conversion Chart

Activity
ENGAGE
Measure out 10m on the ground using a tape measure and then mark out this line using masking tape. Using Post-it notes, mark 100,000 at one end and 0 at the other. Explain to students that 0 means zero years ago (i.e. today) and that 100,000 means 100,000 years ago. Ask students:
- How many centimetres in a metre? How many millimetres? (Some time could be taken here to demonstrate measurement conversions using Appendix A: Metric Conversion Chart depending on student need.)
- If we were to mark the date of British Colonisation (1788), where do you think it would be on the line?

EXPLORE
Explain to students that Aboriginal Australians are one of the oldest populations on earth and are believed to have been here for tens of thousands of years. Studies have traced back their history in Australia up to 70,000 years. British colonisation occurred in 1788. Challenge students to work out (in small groups) the correct place to mark each of these on the timeline. Depending on student ability, this could be left very open for students to problem solve, otherwise the following process may be used to scaffold the problem:

Step 1: Work out how many years in 1m
Step 2: Work out how many years in 1cm
Step 3: Work out how many years in 1mm
Step 4: Combine these as needed to calculate the total distance

EXPLAIN
Ask a representative from each group to share their answers and explain their strategy. Mark both events on the timeline as follows:

100,000 years = 10m
100 years = 1cm
10 years = 1mm
Therefore:
If Aboriginal Australians arrived 70,000 years ago, that's 7m along the timeline.
If the British arrived in 1788 and it is now 2018, that's 230 years which is 23mm or 2.3 cm along the timeline.

ELABORATE
Explain to students that they will now be doing some research to fill in the timeline with more events and detail. Some students will be assigned to investigate Pre-Colonisation and others Post-Colonisation. Ask students to decide how many should be assigned to each task given what they can see on the timeline. Give students some time to research their allocated historical period. Each time they find a new fact/event, they need to write it on a Post-it note and place it in the appropriate position along the timeline.

EVALUATE
In pairs, ask students to reflect on what they have learnt and share:
- Something they didn't know before
- Something that surprised them
- Something that they think other people should know

Finally, have students gather around the timeline and discuss:
- How would you describe Australia’s history?
- What can you say about the information we have collected? Is it evenly spread? Why do you think this is?
- How important do you think it is to know about our entire history?
## Victorian Curriculum

### Level 5

<table>
<thead>
<tr>
<th>MATHEMATICS</th>
<th>Measurement and Geometry: Using units of measurement</th>
<th>Choose appropriate units of measurement for length, area, volume, capacity and mass (VCMMG195)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HISTORY</td>
<td>Historical Concepts and Skills: Chronology</td>
<td>Sequence significant events and lifetimes of people in chronological order to create a narrative to explain the developments in Australia’s colonial past and the causes and effects of Federation on its people (VCHHC082)</td>
</tr>
</tbody>
</table>

### Level 6

<table>
<thead>
<tr>
<th>MATHEMATICS</th>
<th>Measurement and Geometry: Using units of measurement</th>
<th>Connect decimal representations to the metric system (VCMMG222)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Convert between common metric units of length, mass and capacity (VCMMG223)</td>
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<tr>
<td></td>
<td></td>
<td>Solve problems involving the comparison of lengths and areas using appropriate units (VCMMG224)</td>
</tr>
<tr>
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<td>Sequence significant events and lifetimes of people in chronological order to create a narrative to explain the developments in Australia’s colonial past and the causes and effects of Federation on its people (VCHHC082)</td>
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### Sample Report Comments

{Name} has developed an understanding of the scope of Australia’s history, both pre- and post-colonisation, including some significant events and information from these time periods.

{Name} can confidently convert between common metric units (for example 125mm=12.5cm). {He/She} was able to apply this knowledge to create a scaled timeline of Australian history, where ten metres was equal to 100,000 years.

### References

Appendix A

Metric Conversion Chart

Some of these measurements are more commonly used, such as:
- grams, millilitres and kilograms

Others are rarely used, such as:
- dekagrams, hectometres and centigrams

Kilo
- kilograms, kilometres, kilolitres

Hekto
- hektograms, hектometres, hektolitres

Deka
- dekagrams, dekametres, dekalitres

Base
- grams, metres, litres

Deci
- decigrams, decimetres, decilitres

Centi
- centigrams, centimetres, centilitres

Milli
- milligrams, millimetres, millilitres