



Maramataka

Traditionally, Maramataka guided many activities in the lives of iwi communities, such as fishing, planting, harvesting and gathering. The phases of the moon marked the passage of time through the year and the Maramataka also noted the four seasons. 'Maramataka' translates as 'moon rotating'.

The 'Maramataka' learning unit includes suggested activities that explore the topic of Maramataka. Activities are adaptable and can be used as a starting point for further exploration of the topic. Before starting, you may find it helpful to read background information provided in the key reference and resource links section to the right.

Moon images by and courtesy of courtesy of Maurice Collins

Learning areas

Social sciences

- Place and environment
- Identity, culture, and organisation
- Continuity and change

Sciences

- Nature of science
- Planet Earth and beyond

English

- Making meaning of ideas or information
- Creating meaning for themselves or others

Te reo Māori in English – medium

- Communicate about time, weather, and seasons

Key concepts

- Components of the solar system, cultural world-views, traditions and values.

Values and key competencies

Values

- Innovation, inquiry and curiosity
- Diversity
- Respect

Key competencies

- Thinking
- Relating to others
- Using language, symbols, and texts
- Managing self
- Participating and contributing

References

- [Maramataka](#)
- [Matariki booklet](#)
- [The Māori division of time](#)

Resource links

- [Māori fishing calendar](#)
- [Why is the moon upside down?](#)

Exploring the Maramataka



Introducing the Maramataka

Introduce the Maramataka by referring to the Maramataka poster on the Te Papa website. As a class, complete a KWL chart to gauge what students think they Know and what they Want to know about the Maramataka. At the end of the unit you can return to this chart and share key Learnings from the class discussion.

The poster can also be used for initial close reading activities which will deepen the students' understanding of the Maramataka. Ask the students to scan and highlight any unfamiliar words or concepts as they work through the text. Use a combination of questioning, connection-making and inferring activities to help clarify understanding and meaning.

To support the students in structuring their research a literacy focus could be the compare and contrast structure such as subject by subject, point by point or compare then contrast. Provide students with the opportunity to share their research with the class. Have students compare and contrast the Maramataka with the Chinese calendar or other calendars from around the world.

Compare and contrast

Compare the Maramataka to the Gregorian calendar. Frame the concept as a question. How does the Maramataka compare with the calendar used today?

Place the Maramataka poster next to a recent calendar for students to make initial comparisons. Immediately they will see contrasting and comparable features. They may identify things such as one

month in the Maramataka includes two months in the Gregorian calendar, they may also notice that the Maramataka begins in June as oppose to January. Once students have identified as many examples as possible record their initial findings on a compare and contrast map.

Now develop a series of research questions as a class for an in-depth look into the similarities and differences of these two calendars. Some example questions could include:

*What is the meaning behind Maramataka?
What is the meaning behind Gregorian?*

Outline the advantages and disadvantage of a lunar calendar and a solar calendar.

What do the names of the months mean for both calendars? How do the names of the months reflect the world-view of these two cultures?

What are the similarities? What are the differences?

Why does the Maramataka start in Pipiri – May/June? Why does the Western world celebrate the New Year in January?

Nights of the Maramataka 1

The literal translation for Maramataka is 'the moon rotating'. A rotating moon appears as different shapes when orbiting the Earth. These shapes are called 'phases'. Learning the phases of the moon and the corresponding Māori names can occur in the classroom and at home. For a home activity, students can observe and record the apparent shape of the Moon in a diary over a month, which then could

be shared and discussed at school. After every observation students should also learn the corresponding Māori name for that phase and what it represents. This information can be found on the Te Papa website.

After they have collected this data they can then explore how their observations could be explained by making a model of the Sun, the Earth and the Moon and manipulating the model to replicate their observations (it may be helpful to use a strong torch to model the sun). Then they can role play the motion to demonstrate their understanding of the phases of the moon.

Nights of the Maramataka 2

As explained on the Te Papa website, each night of the Maramataka, which also typically marks a day, was given a name and over time each day/night was accompanied by information guiding fishing, gardening, and other activities in the natural world.

Create a large classroom poster of the Māori phases of the moon, ensure to include an image and an explanation of what that phase represents, for example. Day 1: Whiro. The moon enters a new phase. An unfavourable day for planting food and fishing. A good night for taking eels. Through doing this activity students should be able to see that the Maramataka reveals a deep understanding of the relationship between the Moon, the Earth, and the Sun. Have students research the science behind the Maramataka observations. If they were to select the moon phase Tirea, which symbolises a reasonably good night for crayfishing,

eeling, and planting food, also, a good day for collecting shellfish, their research could be based on how the Moon effects tides and rivers.

Provide opportunities to test how the Maramataka remains useful today. Some activities could include gardening and/or harvesting certain vegetables, observing and recording natural phenomena, etc.

Students can demonstrate their understanding of the moon phases by creating a calendar of activities appropriate to a particular time and their local region.

Time to reflect

Create a space that displays the students research, findings and work on the Maramataka. Use that space as a starting point to celebrate and reflect on all the learnings gained.

Return to the original KWL chart and facilitate a discussion using the questions outlined below as a guide:

Were our initial assumptions about Maramataka correct?

Did we find the answers to all our questions?

What were my key learnings?

What does this now mean for us?

Has my view changed as a result of what I've learned?