'Matariki' teachers' notes

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Introduction

Welcome to the teachers' notes for the 'Matariki' interactive on <u>Te Kete Ipuranqi</u>. Matariki is a time to plan, to learn, to share ideas, to reflect on the past, and to celebrate the future. These notes aim to provide you with ideas and support to implement the 'Matariki' interactive into a wider classroom programme about Matariki.

There are also extensive opportunities to incorporate this resource into other wider classroom programmes related to the themes of planning, learning, sharing ideas, reflecting on the past, and celebrating the future.

In the 'Matariki' interactive, students learn:

- to identify the Matariki constellation in the night sky
- the time of year that Matariki lies in the dawn sky
- the significance of this Māori calendar event in Māori life.

How to use these notes

The 'Matariki' interactive has been developed for incorporation into a wider classroom programme about Matariki. These notes provide:

- links to the curriculum
- new words
- learning experiences
- assessment examples and indicators
- links to other resources about Matariki.

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You may find it helpful to have read some of the background information from the links provided in these notes before introducing the topic of Matariki to your students.

Find out what your students already know about Matariki and other star constellations. You could use a think, pair and share technique for this discussion.

You could share a story with the students to introduce the topic. The book *Matariki* by M. Drewery, 2003, Reed Publishing Auckland, shares some of the different stories in Māori tradition about the Matariki constellation. It is available in both English and Māori.

Once students have been introduced to the topic, you could implement the 'Matariki' interactive into the programme.

Provide support for any of the new words that may be unfamiliar to students by writing them on the whiteboard and including them in discussions with your students. A list of new words are provided in these notes.

Achievement objectives

Strand: Making sense of planet Earth and beyond Level: 4

- Students can use simple technical devices to observe and describe our night sky.
- Students can investigate and use models which explain the changing spatial relationships of the Earth, its Moon and the Sun and the way different cultures have used these patterns to describe and measure time and position.

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New words

Below are some star and constellation names that your students will meet while using the interactive and engaging in the proposed activities.

Aldebaran	Taumata-kuku
Antares	Rehua
Arcturus	Ruawahia
Betelguese	Pūtara

Canopus	Autahi
Cariopus	Autaiii
Castor	Whakaahu
Orion's belt	Tautoru
Pleiades	Matariki
Procyon	Puanga-hori
Regulus	Te Kakau
Rigel	Puanga
Sirius	Takurua
Tail of Scorpius	Te Matau a Māui

Learning experiences

Students could:

- design a star map to show where Matariki lies in the night sky during different times of the year
- prepare a report to show how the Māori calendar is used and the key events associated with the time of Matariki
- design greeting cards to celebrate the event of Matariki that incorporate the whakataukī which appear in the 'Matariki' interactive
- investigate the different stories and names from other cultures that are associated with Matariki.

Other learning experiences

- Find shapes in the stars and map your own constellation on a star map. Students could name the constellation and create their own story of how and why it was given that name.
- Explore further, the whakataukī that appear in the 'Matariki' interactive. Students could explore how these whakataukī could be incorporated in the classroom. Discussion could also be facilitated around what their relevance is today in contemporary Aotearoa.
- Prepare a shared class or school feast to farewell the old year and celebrate the new one.
- Draw a plan for a spring garden at school and begin to gather seeds and seedlings.

Assessment examples

Teachers and students could assess the students' familiarity:

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- with the changing spatial relationships of the Earth and the stars, when students identify where Matariki lies in the night sky during the different seasons of the year
- with the night sky, when the students identify several space objects.

Suggested assessment indicators

• Students will be achieving at level 4 when they can use appropriate instruments to enhance observation or to introduce quantification.

This relates to achievement objective: students can use simple technical devices to observe and describe our night sky.

 Students will be achieving at level 4 when they can record observations and measurements.

This relates to achievement objective: students can investigate and use models which explain the changing spatial relationships of the Earth, its Moon and the Sun and the way different cultures have used these patterns to describe and measure time and position.

Related links

Example star maps

http://www.astronomyinyourhands.com/starwheel/starwheel.html#Bilingual

http://www.astronomyinyourhands.com/starwheel/maoriwheel.gif

Information on the Māori calendar

http://www.maori.org.nz/faq/showfaq.asp?fldAuto=9

Resources

http://www.tetaurawhiri.govt.nz/maori/downloads/matariki/MatarikiBooklet.pdf

http://www.tetaurawhiri.govt.nz/maori/downloads/matariki/MatarikiCrossword.pdf

Information about Matariki

http://www.carterobservatory.org/

http://www.hana.co.nz/summer notes.pdf



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http://www.teapot.orcon.net.nz/maori star names.html

http://www.astronomynz.org.nz/maori/maori.htm

http://www.hastingsdc.govt.nz/libraries/FeatureMatariki.htm

http://www.taitokerau.co.nz/matariki.htm

http://www.tetaurawhiri.govt.nz/english/matariki_e/index.shtml

http://www.aucklandcity.govt.nz/whatson/events/matariki/default.asp

http://www.tepapa.govt.nz/education/onlineresources/matariki/Pages/overview.aspx