# CURRICULUM ACTIVITY: Years 7–8 Understanding Lunar and Seasonal Cycles

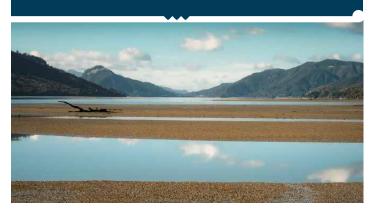
Ākonga research traditional Māori calendars and create presentations showing seasonal/lunar patterns. They investigate how maramataka guided planting, harvesting, and fishing historically. He Maramataka is demonstrated as ākonga integrate scientific observation with cultural knowledge and reasoning.

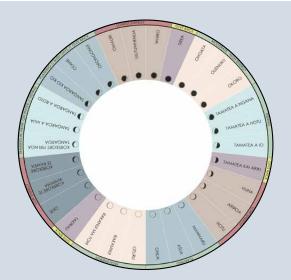
## Tikanga Practices: He Maramataka is portrayed within this scenario through:

- Möhiotanga (Observing & Understanding): Äkonga observe moon phases alongside tidal and weather data, identifying seasonal patterns. They record changes, linking traditional maramataka markers with modern scientific observations.
- Māramatanga (Reflecting and Responding): Ākonga discuss how Māori use lunar knowledge to predict food abundance and environmental shifts, comparing this with their own data to interpret natural balance and sustainability.
- Mātauranga (Applying and Acting): Ākonga create visual or digital maramataka showing seasonal cycles, incorporating local mātauranga and scientific evidence to guide planting, harvesting and well-being decisions at school.

#### Kaiako: Questions for Reflection

- How do you foster ākonga with their curiosity and observation skills to see connections between maramataka phases, environmental data, and cultural explanations of natural change?
- In what ways do you support ākonga to reflect critically on traditional and scientific knowledge, and how these perspectives together inform ecological understanding?
- How can you support ākonga to apply their maramataka learning through authentic action, using timing, reciprocity and respect for natural cycles in daily practice.





### KARAKIA MŌ TE WHAKATŌ KŪMARA

(Incantation for planting Kūmara)

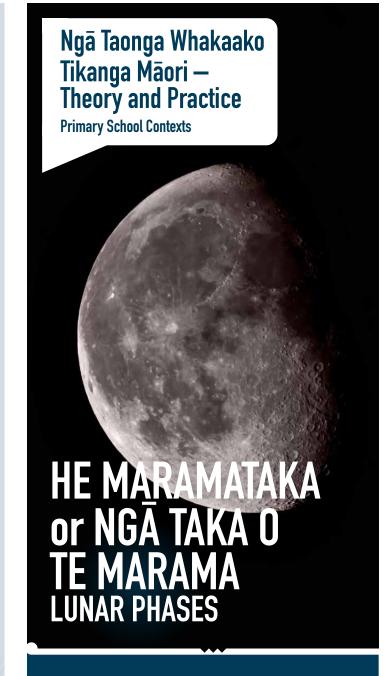
Mai te marama
ngā manaaktanga o Takirau,
Kia whakapaki mātou i te whenua
E Rongo homai tō hā te ora o ngā kūmara
tiakina mātou i a mātou mahi, ā mātou tipu.
Whakarongo mai,
kia hauhake pai ā mātou kai
Ka ora te whenua, ka ora tātou katoa.

From the moon above
The energy of Takirau radiates towards us.
We get the soil ready with care.
Rongo, god of the kūmara,
breathe life into our plants.
Watch over us as we work and as our kūmara grow.
Listen to our voices,
so we may harvest nourishing food.
As the land is nourished
So too are we.

NB: You are able to adapt this karakia by swapping out Kūmara for other plants



Scan for pronunciation support







Authors: Ngaroma M. Williams, Tracy Dayman, Lana R. Williams, 2025.

## HE MARAMATAKA or NGA TAKA O TE MARAMA LUNAR PHASES

He Maramataka or Ngā Taka o te Marama the repeating cycles of the moon. This is a versatile multi-purpose navigational system that crosses land and sea while extending to animate and inanimate beings. This system connects all things above to all things below, including those things found in the water. Providing insight, correct engagement, prudent planning and successful forecasting.





## **CURRICULUM ACTIVITY:** Years 1–3 Understanding Lunar and Seasonal Cycles

Restoration through

the seasons

Tamariki observe the weather each day and discuss how it affects play and outdoor learning. They plant seeds in a small garden and notice when plants grow best. He Maramataka is applied as tamariki learn to connect natural cycles with daily activities.

#### Tikanga Practices: He Maramataka is observed through:

- Mohiotanga
  (Observing the
  Sky and Weather):
  Each morning,
  tamariki look to the
  sky and note clouds, wind, and warmth. They share what the day
  feels like, learning to notice patterns that link to maramataka days.
- Māramatanga (Listening to Nature's Signs): Tamariki listen for manu, watch trees, and feel the breeze, learning that these natural signs tell stories about coming rain or sunshine—helping them tune into nature's rhythms.
- Mātauranga (Acting with Care and Timing): On fine, bright days, tamariki help water the garden or gather leaves for compost. When it rains, they collect rainwater, learning that each weather change brings its own purpose.

#### Kaiako: Questions for Reflection

- How do you help tamariki notice and describe changes in weather and environment through daily observation?
- 2. In what ways do the classroom routines reflect natural rhythms, such as planting, harvesting, or outdoor play times?
- 3. How do you foster curiosity and respect for nature's patterns as part of everyday learning?

## CURRICULUM ACTIVITY: Years 4–6 Understanding Lunar and Seasonal Cycles

Tamariki record plant growth in the school garden and compare it with lunar phases, learning when planting or harvesting is most effective. They discuss how these cycles affect local ecosystems and traditional Māori knowledge. He Maramataka is enacted as tamariki link observation with cultural and environmental understanding

#### Tikanga Practices: He Maramataka is evident here through:

- Möhiotanga (Observing and Understanding): Tamariki observe the moon each night, draw its shape, and share how the sky, tides, and garden feel different. This fosters awareness of natural rhythms and collective noticing.
- Māramatanga (Reflecting and Responding): As the moon shifts, tamariki discuss energy levels and moods, connecting their feelings to lunar changes. They learn to plan calm or active days in harmony with the maramataka.
- Mātauranga (Applying and Acting): During a Rākaunui phase, tamariki plant quick, growing seeds and record growth. They compare results with other moon phases, exploring how maramataka guides right timing for productive planting.

#### Kaiako: Questions for Reflection

- How are your tamariki developing their capacity to notice and describe patterns in the moon, tides, and garden growth; and how do you encourage them to connect these observations to wider environmental and cultural rhythms?
- 2. In what ways are you helping tamariki reflect on how lunar changes might influence their own energy, emotions, and learning; and how can these reflections shape the flow of the classroom activities?
- 3. How do you support tamariki to apply their understanding of He Maramataka when planning hands-on activities, such as planting or harvesting, so they experience the value of timing and responsiveness in both nature and learning?

