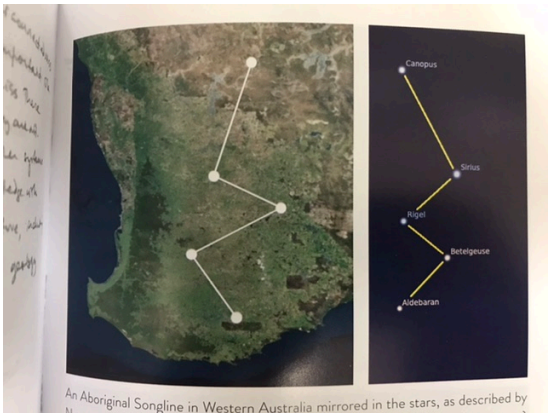
Year 2 Indigenous Astrology: Star Maps and Tides

As the Yr 2 Neighbourhood has been relating many aspects of this year's learning to indigenous story and culture, they chose to express their understandings of Indigenous star maps and tidal knowledge through bell and percussion sounds.

We have begun to learn how Indigenous Astronomy shows us that Country is mirrored in the starry skies above, and that the starry skies are, in turn, reflected in Country. By knowing how to 'read' the subtle changes in the night sky, our First Nations' People knew when to gather emu eggs and the best times to fish or plant crops. Certain constellations could serve as memory aids to assist with navigation across Country, indeed, some of our contemporary major highway routes follow the traditional indigenous pathways, or Songlines, as directed by the stars.

By using the bell travelling cases to represent the pathways between the stars, the Yr2s decided to create two star-maps: the star-map in the sky and its earthly reflection. The celestial star-map would be laid out in the northern end of the gym. It would be in the shape of a Songline star-map which guided travel routes in south west Western Australia. The stars would be represented by the sounds of Fed Bells, metalophones, chimes and other metallic resonant objects. The earthly mirror of this star map would be laid out in the southern end of the gym with an instrumentation derived from vegetation: cascading chick-peas, seed shakers, bundled sticks rattling in the travelling crates, wooden xylophones and log drums. Students would slowly navigate their way around the star-maps and sound the installation.



A Songline star-map from Western Australia inspired our installation shape. Students began sounding the earthly map by playing the bell travelling cases with chopsticks and other wooden instruments.

The Preps line up to sing 'Twinkle. Twinkle Little Star' behind the celestial Songline. This photo also shows the moon curtain which was used to indicate the change of tide in the performance.

The Yr 2s also researched that indigenous cultures across the world have understood the impact of the moon's gravitational pull on water: the seas and oceans, and the rising and falling of sap in plants.

Through observation, indigenous people knew that the best times to fish were when the tides were at their most calm and the waters were clear. Fish could see the fishing lures. These calm ‘neap tides’ occur when the moon is in its quarter and three-quarter phases. King tides happen when the moon is full and orbiting closest to earth. These tides are higher than the usual high tides of the full moon and the new moon, and the seas are rough and full of stirred up sand.

Full moon phases are not a good time to fish as fish stay far out to sea to avoid being dashed on the reefs, and fishing conditions are dangerous. As sea levels rise with climate change, we are aware of the impact of king tides on island communities. The sound for the changing tides was made by sliding the rim of a handbell across the gym floor which created a sound of friction with a whisp of pitch. The faster we moved the bells, the rougher our imagined tides became. After the students had sounded their star maps, they then lined up down the centre of the gym and illustrated their understanding of the tides through sound. Having painted a giant full moon on a curtain which was spot lit from behind for the performance, students followed the phases of the moon which were shown by disc passing in front of the spot light to create a shadow across the moon. The students watched the changing moon phases and performed the corresponding tide.

Yr 2 students painting the moon curtain.

Peter demonstrates the gentle ‘reach’ of the neap tide, the greater reach of the king tide in performance, and the students practise co-ordinating their movements in the gym by observing the moon.