

## **Earth & Beyond**Teacher Newsletter Term 1 2011

The new school year starts, and with it comes a range of new real life teaching opportunities for you to take advantage of with your class. The most notable predictable teaching events you might like to focus on in first term 2011 are the opposition of Saturn in April, and the 'largest' Full Moon for 2011 (which occurs on Sunday 20 March). You may simply ask your students to note how large the Moon appears to be as it rises. Alternatively, if you are lucky enough to live near the ocean, ask your students to observe the Full tide immediately after Full Moon (which occurs at 4.10am AEST). The closeness of the Full Moon will cause higher tides than usual (known as a 'King tide). Your students will notice the difference as very low lying areas near the sea will be flooded by seawater that aren't usually.

Don't forget to alert your students to a number of spacecraft encounters with Solar System objects that will be occurring this term. NAŚA's Stardust-NExT spacecraft will encounter Comet Tempel 1 on 14 February. This is the second time this comet has been visited by a spacecraft. NASA's Messenger spacecraft will go into orbit around the planet Mercury early on the morning of Friday 18 March. We will be treated to views of a planet that is very difficult to study from Earth due to its closeness to the Sun. Your students will be able use the Internet to access images from both these missions.

Regards, Paul Floyd. www.nightskyonline.info

### **2011 Moon Phases**

	New	First Quarter	Full Moon	Last Quarte
February	3	11	18	25
March	5	13	20	26
April	4	11	18	25

## **Easy Constellations**



Look high above the North Western horizon at the end of evening twilight.

Crux 'The Southern' Cross' and 'The Pointers' Look above the South Eastern horizon at the

end of evening twilight.

Make the Universe part of your school

2012 bookings for Nightskyonline.info's Mobile Planetarium Service open on 1 July 2011.

- \* Wide range of programme choices
- \* Fun, enjoyment, excitement
- Experienced service provider (31,000 students and adults).
- \* We bring the universe to your accomodation venue.\*

excursion to Canberra!

<sup>\*</sup> Contact us for a list of Canberra accomodation venues with suitable hall space.

# Best nights for a star party in Term 1 2011

Amateur astronomical societies are generally happy to assist schools by running a star party. This mean that they will bring telescopes and volunteers to your school so that your students can look through them at the night sky. Book ahead and avoid the time just between First Quarter Moon and two nights after Full Moon to avoid the light of the Moon washing out other sky objects. Using this criteria, the best nights therefore are:

- \* Tuesday 8 to 10 Thursday February
- \* Thursday 10 to 12 Saturday March
- \* Friday 8 to 10 Sunday April

A list of astronomical societies in the A.C.T. and South East Queensland can be found on the World Wide Web at http://nightskyonline.info/?page\_id=730

#### **Horizon star charts**



## Planets visible to the eye

**February 2011:** Jupiter is visible low above the Western horizon in the evening twilight for most of the month.

March 2011: March is a quiet month for planet watching in the early evening sky. The only exception is that as March draws to an end, Saturn will be visible low above the Eastern horizon around 8pm AEST onwards as a pale yellow star. The later you look, the higher in the sky it will be.

**April 2011:** Saturn reaches opposition on 4 April. For the casual skywatcher, this means that Saturn is at its closest to the Earth for the year. A medium sized telescope will easily show the rings of Saturn.

