

Australian Backyard Astronomy



Teachers Notes

[Maps in the night sky](#)

Start your search into space with charts, globes and a look at some constellations. How have cultures around the world talked about the night sky?

[The solar system](#)

Travel through the solar system, starting at the sun, past the inner planets and all the way to the outer planets. Beware of the comets, asteroids and meteorites you might meet on the way.

[Exploring the night sky](#)

What do astronomers need to look at and measure the night sky? What will help you find your way around?

[Life and death of stars](#)

Who was Joseph von Fraunhofer? See the life story of stars—from birth in a nebulae to death in a supernova, pulsar and black hole.

[Beyond the solar system](#)

What do the Milky Way and other galaxies look like? What shape is the universe? How did it all start? Are we alone? Also contains links to Australian observatories.

Maps in the night sky



[Astronomy picture of the day](#)

(<http://antwrp.gsfc.nasa.gov/apod/astropix.html>)

[American Library Association](#) great websites for kids on astronomy and space

(<http://www.ala.org/gwstemplate.cfm?section=greatwebsites&template=cfapps/gws/displaysection.cfm&sec=27>)

[A description and illustration of the Southern Cross](#) by sixteenth-century explorer Andrea Corsali

(<http://nla.gov.au/nla.ms-ms7860-1-s3>)

[Explore space with NASA](#) (requires flash)

(<http://www.nasa.gov/audience/forkids/kidsclub/flash/index.html>)

[Astronomy for kids](#): Fun With Astronomy

(<http://www.kidsastronomy.com/>)

Where are the constellations?

[A chart of the current night sky](#) at Sydney Observatory

(<http://www.sydneyobservatory.com.au/blog/?cat=10>)

[An introduction to the constellations](#) (links to night-sky photographs)
(<http://www.astro.uiuc.edu/~kaler/sow/const.html>)

[An interactive map of the constellations](#)
(http://www.astro.wisc.edu/~dolan/constellations/java/Canes_Venatici.html)

Stories from other cultures

[Aboriginal astronomy](#)
(<http://library.thinkquest.org/C005462/index2.html>)

[Astronomy of ancient cultures](#): Follows the links to learn about astronomy of the Mayans, the North American Indians, the Incas, Islamic Arabs, Chinese, Indians
(<http://www.starteachastronomy.com/archaeoastronomy.html>)

The solar system



Travel through the solar system

[A Guide to the Solar System](#)
(<http://www.onlineuniversity.net/science/earth-science/the-solar-system/>)

Tours through the solar system

[Kids Astronomy](#) - The Solar System
(http://www.kidsastronomy.com/solar_system.htm)

Sun spotting

[Solar eclipses around the world](#)
(<http://www.exploratorium.edu/eclipse/>)

[Ever wondered what the sun's surface looks like?](#)
(<http://www.thesurfaceofthesun.com/>)

[Build a sundial](#) (from the British Sundial Society)
(<http://www.sundials.co.uk>)

Explore the inner planets

[Kids astronomy](#)
(<http://www.kidsastronomy.com>)

[Explore Mars](#)
(http://www.kidsastronomy.com/mars_explorer.htm)

[Surface of Mars, close-up](http://www.msss.com/moc_gallery/s05_s10/narrowangles.html)

(http://www.msss.com/moc_gallery/s05_s10/narrowangles.html)

Explore the outer planets

[Virtual solar system](http://www.nationalgeographic.com/solarsystem/splash.html)

(<http://www.nationalgeographic.com/solarsystem/splash.html>)

[ESA astronomy for kids](http://www.esa.int/esaKIDSen/index.html)

(<http://www.esa.int/esaKIDSen/index.html>)

[NASA's Voyager missions to the outer planets and beyond](http://voyager.jpl.nasa.gov/)

(<http://voyager.jpl.nasa.gov/>)

[Kepler Mission](http://kepler.nasa.gov/)

(<http://kepler.nasa.gov/>)

[ESA Corot](http://www.esa.int/SPECIALS/COROT/SEM7G6XPXP_0.html)

(http://www.esa.int/SPECIALS/COROT/SEM7G6XPXP_0.html)

Find out more about asteroids, meteors and comets

[Asteroids](http://www.seds.org/billa/tnp/asteroids.html)

(<http://www.seds.org/billa/tnp/asteroids.html>)

[NASA Stardust collects samples from a comet's tail](http://stardust.jpl.nasa.gov/home/index.html)

(<http://stardust.jpl.nasa.gov/home/index.html>)

[Comets and Meteor Showers](http://www.onlineuniversity.net/science/earth-science/comets-and-meteor-showers/)

(<http://www.onlineuniversity.net/science/earth-science/comets-and-meteor-showers/>)

Exploring the night sky



Inside the astronomer's toolkit

[Who invented the telescope?](http://www.kidsastronomy.com/telescopes.htm)

(<http://www.kidsastronomy.com/telescopes.htm>)

[History of the Telescope](http://en.wikipedia.org/wiki/History_of_the_telescope)

(http://en.wikipedia.org/wiki/History_of_the_telescope)

[What about binoculars?](http://www.islandnet.com/~yesmag/how_work/binoculars.html)

(http://www.islandnet.com/~yesmag/how_work/binoculars.html)

Interviews with Australian Astronomers

[John Storey](http://nla.gov.au/nla.oh-vn3702230)(<http://nla.gov.au/nla.oh-vn3702230>)

[Warrick Couch](http://nla.gov.au/nla.oh-vn3701838)(<http://nla.gov.au/nla.oh-vn3701838>)

[Michael Bessell](http://nla.gov.au/nla.oh-vn3566297)(http://nla.gov.au/nla.oh-vn3566297)

[Brian Boyle](http://nla.gov.au/nla.oh-vn3598035)(http://nla.gov.au/nla.oh-vn3598035)

[Matthew Bailes](http://nla.gov.au/nla.oh-vn3807244)(http://nla.gov.au/nla.oh-vn3807244)

[Lister-Steveley-Smith](http://nla.gov.au/nla.oh-vn3995662)(http://nla.gov.au/nla.oh-vn3995662)

More astronomers' measurements

[The facts about magnitude](#)

(http://curious.astro.cornell.edu/question.php?number=569)

Resources to help you find your way around Australia's night sky

[A chart of the current night sky at Sydney Observatory](#)

(http://www.sydneyobservatory.com.au/blog/?cat=10)

Life and death of stars



See more nebulae

[Joseph von Fraunhofer's life and work](#)

(http://en.wikipedia.org/wiki/Joseph_von_Fraunhofer)

[What can scientists learn from a spectrum?](#)

(http://imagine.gsfc.nasa.gov/docs/science/how_l1/spectra.html)

Find out more about the life story of stars

[Ask an astronomer](#)

(http://curious.astro.cornell.edu/question.php?number=38)

[NASA overview of the life cycle of stars](#) (older readers)

(http://map.gsfc.nasa.gov/m_uni/uni_101stars.html)

[Life cycle of stars in animation](#) (large download, and requires Flash)

(http://www.ioncmaste.ca/homepage/resources/web_resources/CSA_Astro9/files/multimedia/unit2/star_lifecycle/star_lifecycle.html)

Supernovae, black holes and pulsars

[Jocelyn Bell talks about her discovery of pulsars](#)

(http://www.bigear.org/vol1no1/burnell.htm)

What does a black hole look like? The Hubble Space Telescope has been able to give us a close-up view of some distant black holes:

[Black hole in a far-distant galaxy](#)

(<http://hubblesite.org/newscenter/newsdesk/archive/releases/1995/47/>)

[Black hole galactic cannibalism](#)

(<http://hubblesite.org/newscenter/newsdesk/archive/releases/1998/14/>)

Beyond the solar system



The Milky Way and other galaxies

[Stars and galaxies: the Milky Way](#)

(http://www.esa.int/esaKIDSen/SEM536WJD1E_OurUniverse_0.html)

[Interacting Spiral Galaxies](#)

(<http://hubblesite.org/newscenter/newsdesk/archive/releases/2004/45/image/a>)

More about the Doppler effect

[Record the Doppler effect for yourself](#) (uses an electric shaver)

(http://www.weatherwizkids.com/doppler_effect.htm)

A story of the universe

[The big bang](#)

(http://www.esa.int/esaKIDSen/SEMSZ5WJD1E_OurUniverse_0.html)

[Australian dreamtime](#)

(<http://www.dreamtime.net.au/creation>)

[Creation mythology: Egyptian](#)

(<http://members.aol.com/egyptart/crea.html>)

Continue your search for ET

[SETI Institute](#)

(<http://www.seti.org>)

[Codes and decodes](#)—yelling across the solar system

(<http://spaceplace.nasa.gov/en/kids/st5xband/st5xband.shtml>)

For older readers

[Ask an astronomer](#)

(<http://curious.astro.cornell.edu/question.php?number=62>)

[The long and technical Wikipedia discussion](#)

(http://en.wikipedia.org/wiki/Shape_of_the_universe)

[Proof the universe is flat](http://news.bbc.co.uk/1/hi/sci/tech/727073.stm)

(<http://news.bbc.co.uk/1/hi/sci/tech/727073.stm>)

[Is the universe really like an expanding balloon?](http://curious.astro.cornell.edu/question.php?number=651)

(<http://curious.astro.cornell.edu/question.php?number=651>)

[The International Astronomical Union \(IAU\) has voted to demote Pluto to a 'dwarf planet'](http://www.iau.org/public_press/themes/pluto/)

(http://www.iau.org/public_press/themes/pluto/)

[More about dwarf planets \(Wikipedia\)](http://en.wikipedia.org/wiki/Dwarf_planet)

(http://en.wikipedia.org/wiki/Dwarf_planet)

[About extrasolar planets \(Wikipedia\)](http://en.wikipedia.org/wiki/Extrasolar_planet)

(http://en.wikipedia.org/wiki/Extrasolar_planet)

Print Publication

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