



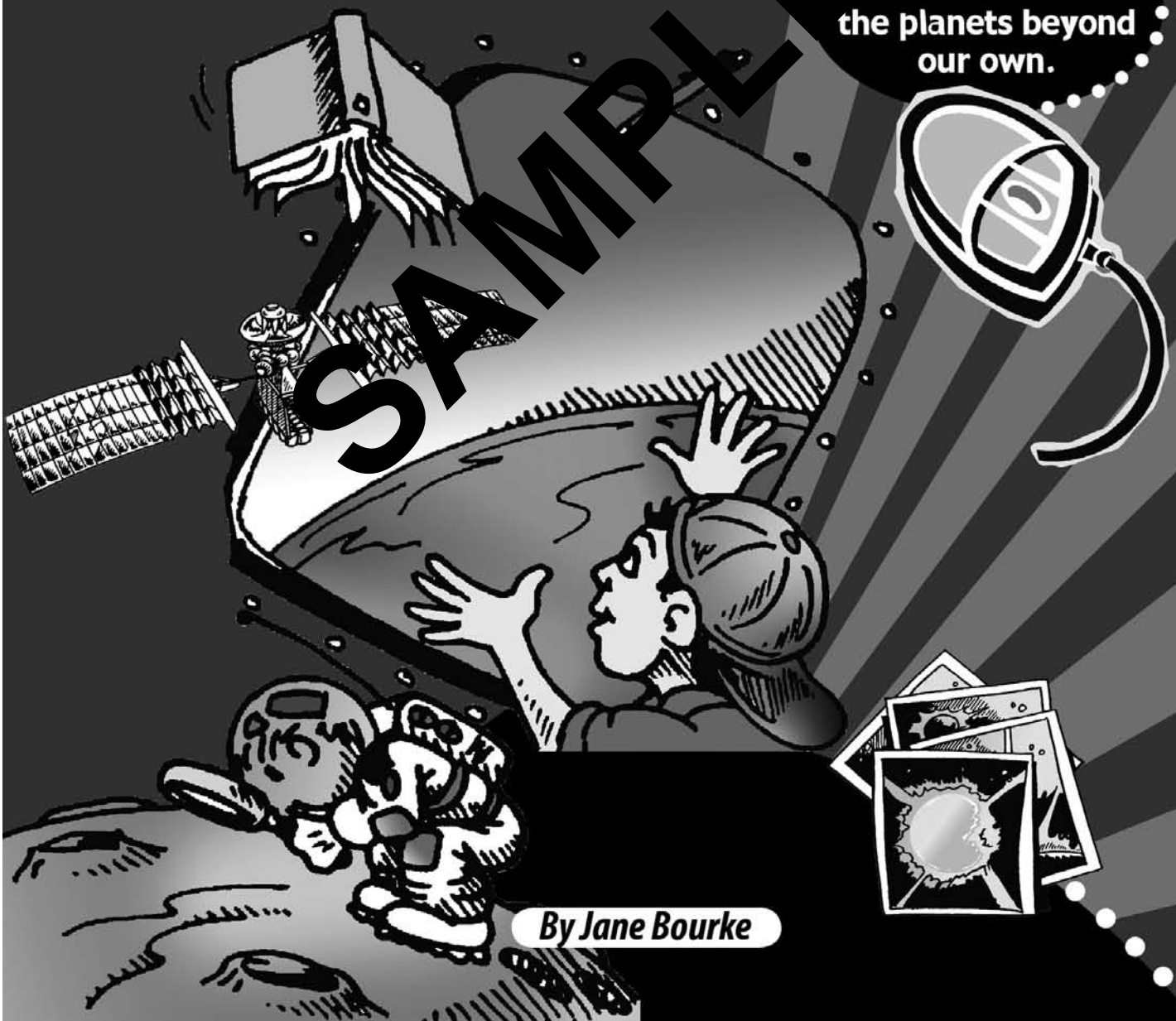
Internet Quests Series



10+ YEARS

Astronomy and Space

Using the Internet to research the planets beyond our own.



By Jane Bourke

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Notes For Teachers & Parents

The Internet Quests Series is designed to make use of the enormous amount of information that is available through the Internet.

The term “information superhighway” is a buzz phrase that is constantly talked about in educational and other circles. As a generation that is comfortable with the idea of computers and associated concepts, the 10 to 12 year old children in our care deserve the opportunity of zooming down that superhighway. But just where is the on-ramp and how do children negotiate their way through the traffic jam that makes up the Internet?

This book is produced to allow children to answer those questions for themselves. In doing so, they will understand the following concepts linked to the curriculum:

- *Use recognised research skills to reason to questions posed as focusing activities.*
- *Use recognised research skills to extrapolate information from internet references.*
- *Use selected World Wide Web addresses to extend understanding on a theme.*
- *Use a variety of net search engines to expand on the information available.*
- *Use the links provided at addresses to broaden the scope of their investigations.*

Some Internet Warnings 1

‘NET NASTIES’

In recent years there has been a great deal of publicity about negative aspects of the Internet, so much so that the uninitiated may well have severe concerns about what young users might encounter when surfing the Net.

There is no doubt that this concern could be well-founded if children are left to their own devices when online. The key to avoiding ‘net nasties’ is supervision, just as it is to avoid inappropriate experiences for children in selecting movies, television programmes and books. It is most unlikely that violent, racist or erotic sites are reached accidentally and the Internet Quests materials and addresses have been carefully screened to avoid this happening. However, the Internet is a fluid, dynamic resource that is always in motion and we can’t guarantee that what is appropriate now will still be next year. With this in mind, it is strongly recommended that parents/teachers preview sites if at all possible.

Filter tools have been designed by some companies to help protect children from the undesirable aspects of the Internet. Some of the filter tools which offer online information are:

Net Nanny - ► www.netnanny.com

Cyber Patrol - ► www.cyberpatrol.com/

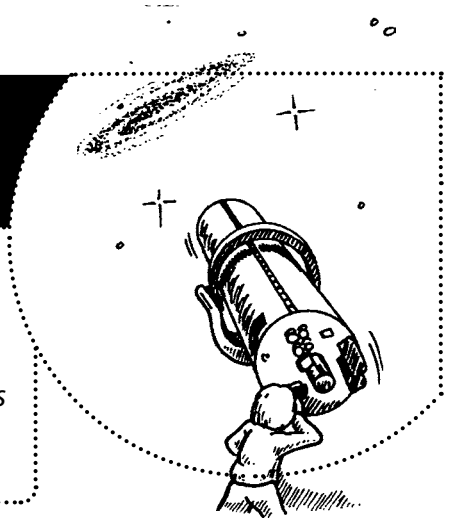
The Solar System

Go to:

www.eightplanets.org/

Scroll down to **Solar System Overview**

The Solar System is shaped like a disk and is only a tiny part of a galaxy called the Milky Way. The Milky Way consists of hundreds of billions of stars including the Sun. Some of these other stars may even have planets orbiting them as well.



Read through the information at the website and answer the questions below.

1. What does the Solar System consist of? _____

2. Complete the table below by placing the names of the correct planets under each heading.

<i>Inner Solar System</i>	<i>Outer Solar System</i>

3. Which planets were only discovered in modern times? _____

Why were they not seen before? _____



Go to the contents page www.eightplanets.org/
Click onto each of the eight planets to answer the questions below.



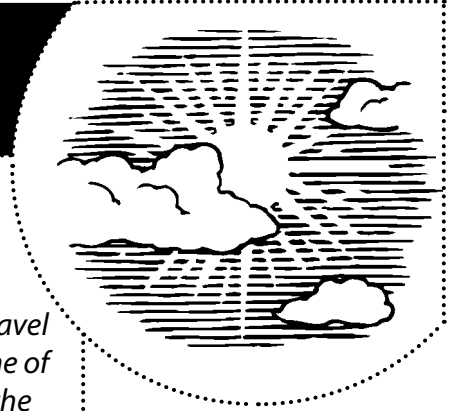
Which planet is ...

- Named after the God of the Sea? _____
- The sixth planet from the Sun? _____
- Closest to the Sun? _____
- The brightest planet? _____
- Known as the red planet? _____
- Not named after a Roman or Greek God? _____
- Named after Zeus, the King of the Gods? _____
- Discovered by accident when William Herschel looked through his telescope? _____

The Sun and Other Stars

Go to: www.solarviews.com/eng/sun.htm
and answer the questions below.

The Sun is a huge, glowing ball of gases at the centre of the Solar System which the Earth and the other seven planets travel around. The Sun is the closest star to the Earth, yet is only one of a billion stars in the universe. Without the heat and light of the Sun, there would be no life on the Earth.



1. How many Earths would be required to fit across the Sun's disk? _____
2. What is the temperature of the Sun's outer visible layer? _____
3. What is the temperature at the core of the Sun? _____
4. About how long does it take for energy, produced at the Sun's core, to reach the surface?

5. According to scientists, for how long has the Sun been active? _____



Go to: <http://starchild.gsfc.nasa.gov/docs/StarChild/StarChild.html>
Click on Level 1: Universe in the box, then click on Stars in the box.



In the boxes below write the phases in the life cycles of medium stars and massive stars.

Life cycle of a medium star

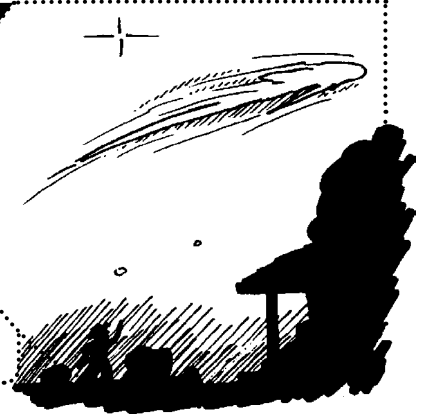
Life cycle of a massive star



Skywatcher

Go to: www.questacon.edu.au/starlab/comet_info.html

Read about how common comets are and the chances of them hitting the Earth. Then use your online research skills to find out when the next comets are due to fly over Earth.



Write an article for a newspaper describing the comets that are heading our way.

SAMPLE

Make a Comet Chart

Using the website above and the Google search engine, make a comet book which includes some of the more spectacular comets. You should be able to get photographic images of each of the comets below if you work hard.

Halley, Hyakutake, Hale-Bopp, Shoemaker- Levy and West.

Don't forget to use all of the links that you have found.