



This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

What I saw



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Comet Questions

Use the internet or the attached educational info to find the answers to these questions about comets and any others you may have:

http://starchild.gsfc.nasa.gov/docs/StarChild/solar_system_level1/comets.html
<http://www.newton.dep.anl.gov/askasci/ast99/ast99101.htm>
<http://www.astronomycafe.net/qadir/ametcom.html>
<http://www.solarviews.com/eng/comet.htm>

1. What date and time did you spot Comet McNaught?

2. From where did you view the comet?

3. What is a comet made of?

4. How long is Comet McNaught's tail? _____

5. From what is the tail made? _____

6. Who first spotted this comet and when? _____

7. Will we see it from Earth again? _____

8. How far is Comet McNaught from Earth?

9. How far is the comet from the sun?

10. How big is the comet (estimate)?





11. Why can we see the comet?

12. What is the best place and time to see the comet with the naked eye?

13. How fast can a comet move? _____

14. List some other comets that have been spotted from Earth.

15. What other interesting comet facts did you discover? _____





Comet McNaught

...visits Southern Africa

Compiled by the Astronomical Society of
Bloemfontein City, 2007 - www.assabfn.co.za

Comet C/2006 P1 McNaught was only discovered in August 2006, by Robert McNaught of Siding Spring Observatory in Australia. It is a so-called "non-periodic" comet, meaning that it might never return to the Sun again. So enjoy the sight while you can!



Comet Characteristics:

Distance (average) from the Earth between 19 and 29 January: 144 million km (the Sun is 150 million km from the Earth). McNaught was closest to the Sun on 12 January but is now receding from the Sun and Earth daily.

Length of tail: Only a rough estimate can currently be made, but it is many millions of kilometres!

Time that it takes to make one orbit around the Sun: More than 200 years, but probably thousands. It might even be that it will never return to the Sun again. Does the comet pose a **threat** to Earth? NO! It is the **brightest** comet in **over 40 years**.

What are comets?

A comet is basically a massive piece of rock floating in space, orbiting the Sun. This "rock" can be a few kilometres in diameter, but in some instances even hundreds. When the rock is attracted to the Sun it begins to "melt", due to the solar wind and radiation pounding on this icy rock. (Remember, it is very cold in outer space!) The rock gets enveloped in a "coma" (the fuzzy head, or nucleus of the comet) and starts shedding materials to form a tail. Remember, you're not seeing flames, the comet is "melting"!



What do comets consist of?

The core of comets (the "central rock") consists mostly of ice, rock and dust. The tail is made up of material (gas and dust) that streams from the nucleus. The tail can stretch for millions of kilometers! Comets are very old: they are messengers from billions of years ago and can tell us a lot about the formation of our solar system and planets. They appear to mostly originate from the mysterious "Oort Cloud" on the outskirts of the solar system.

Until when can we see McNaught?

Until the end of January you can still see McNaught with your naked eyes, but it is already becoming fainter each evening. Watch the comet until it is totally dark outside, so you can appreciate a fuller view of its tail. Time: 19h40 to 20h40 in the south-west. A *dark sky west of the city* is recommended.

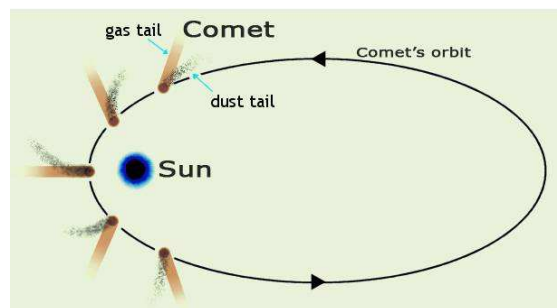
Where can you get more information on comets?

ASSA Bloemfontein Centre: www.assabfn.co.za

Wikipedia.org: www.wikipedia.org

Nineplanets: www.nineplanets.org

For children: <http://starchild.gsfc.nasa.gov/>



A typical comet's orbit around the Sun.