

Science - Year 5

Earth and Space – Block 5ES

Space Presenters

Session 6

Resource pack









Moon images



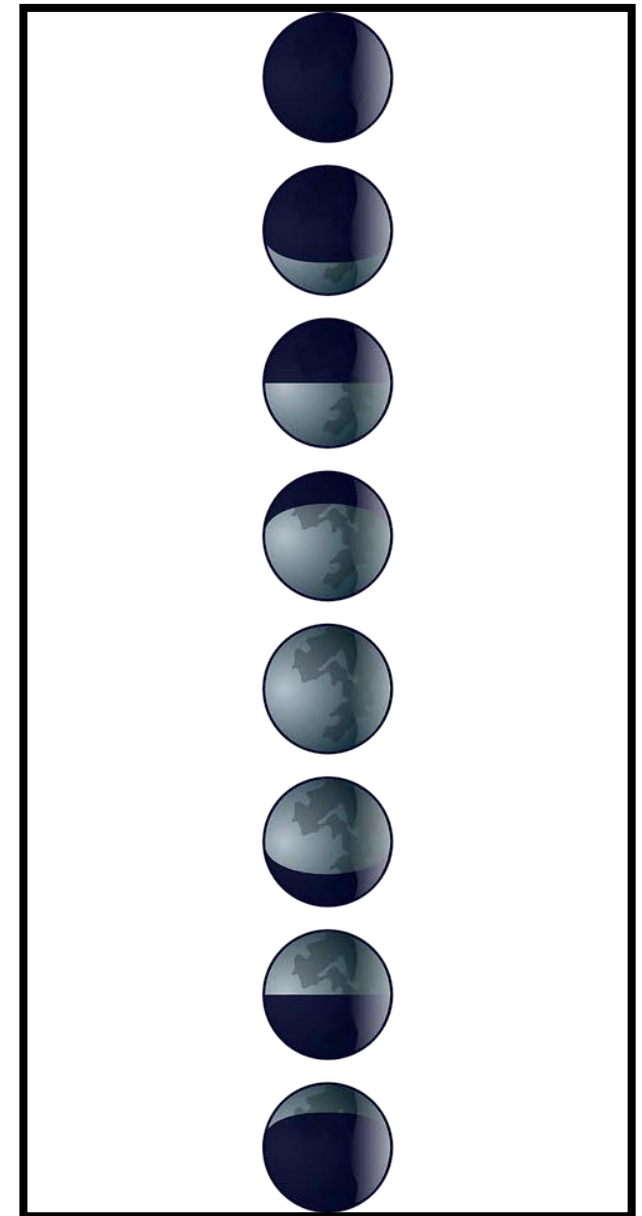
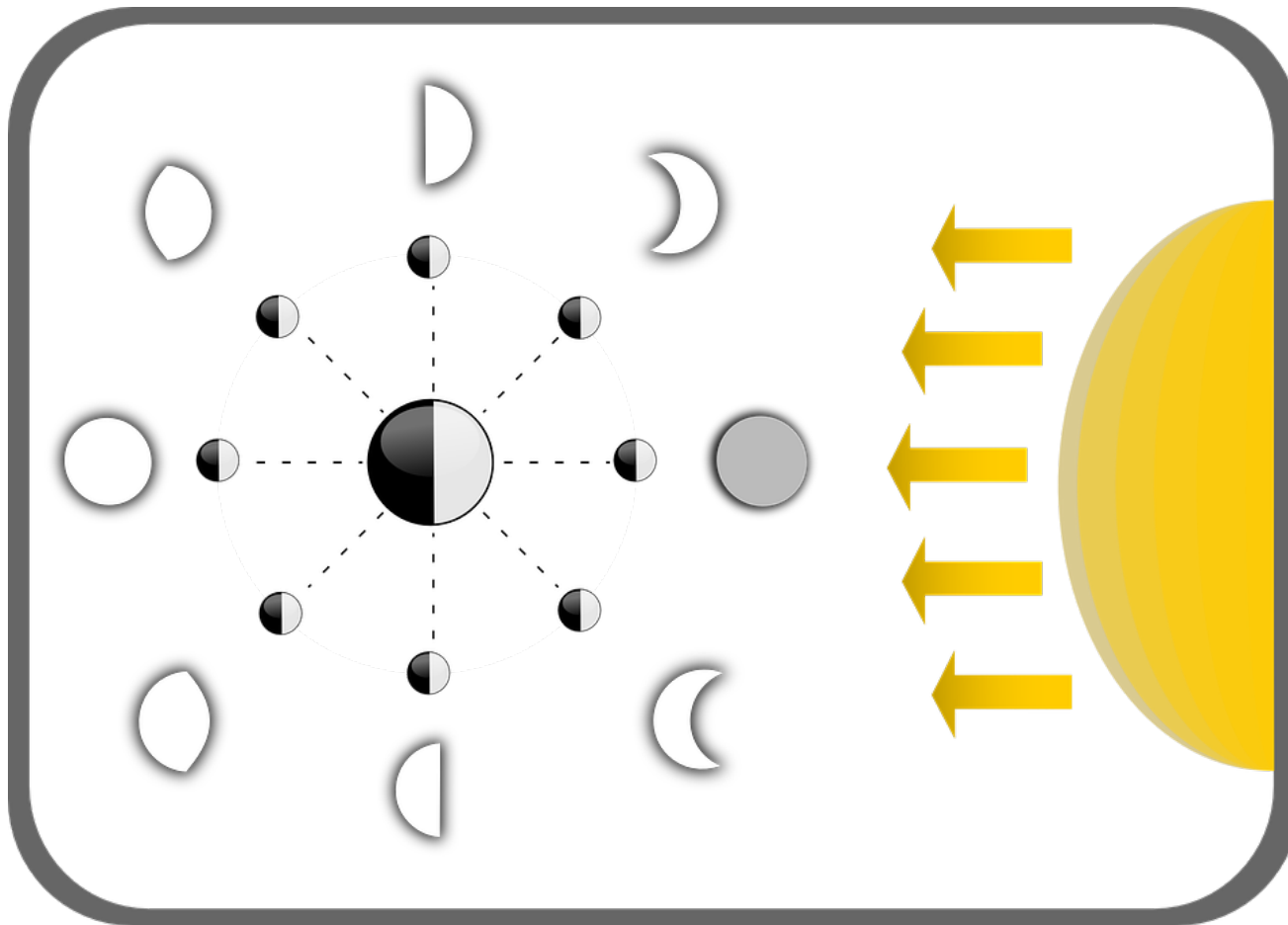


Lunar Phases

From any location on the Earth, the Moon can be seen as a circular disk. Like the Earth, the Moon is a sphere which is always half illuminated by the Sun, but as the Moon orbits the Earth we get to see more or less of the illuminated half. During each lunar orbit (a lunar month), we see the Moon's appearance change from not visibly illuminated through partially illuminated to fully illuminated, then back through partially illuminated to not illuminated again. Although this cycle is a continuous process, it is often shown in stages, called phases.

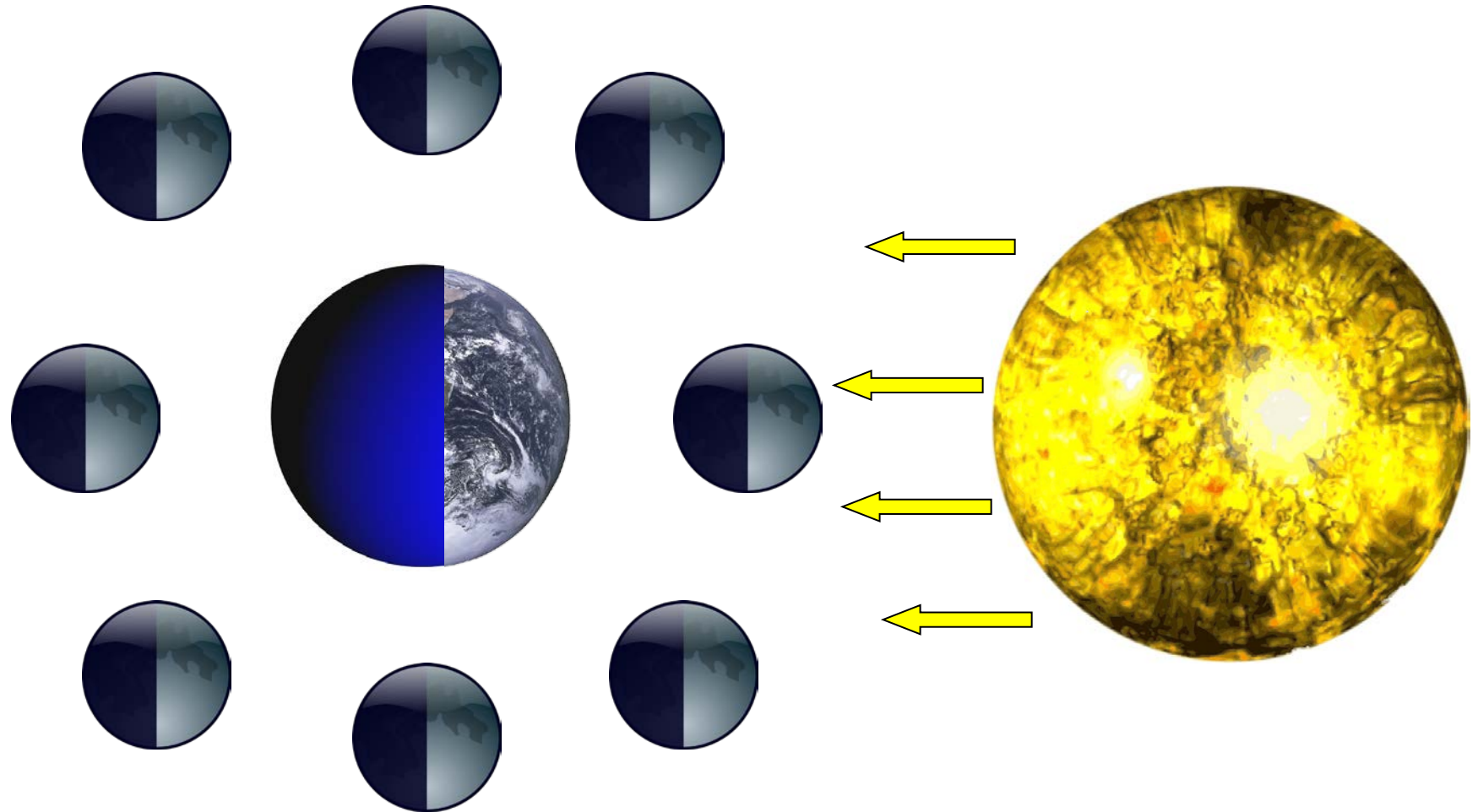
	New Moon - The Moon's illuminated side is facing away from the Earth. The Moon is not visible (except during a solar eclipse).
	Waxing Crescent - The Moon appears to be partly but less than one-half illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is increasing.
	First Quarter – One half of the Moon appears to be illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is increasing.
	Waxing Gibbous - The Moon appears to be more than one-half but not fully illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is increasing.
	Full Moon - The Moon's illuminated side is facing the Earth. The Moon appears to be completely illuminated by direct sunlight.
	Waning Gibbous - The Moon appears to be more than one-half but not fully illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is decreasing.
	Last Quarter – One half of the Moon appears to be illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is decreasing.
	Waning Crescent - The Moon appears to be partly but less than one-half illuminated by direct sunlight. The fraction of the Moon's disk that is illuminated is decreasing.

Moon phases - reference sheet for teacher

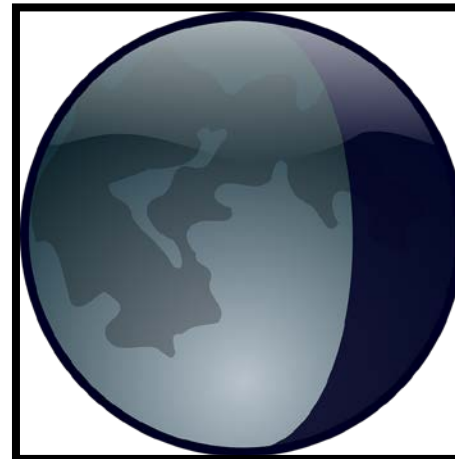
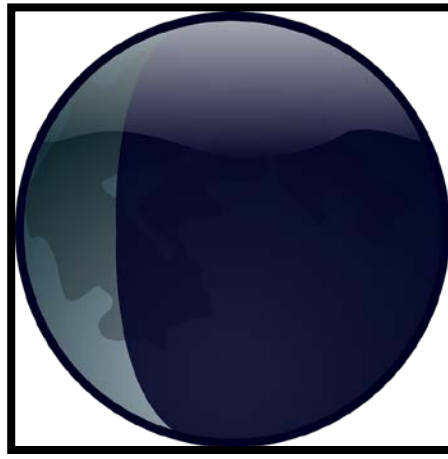
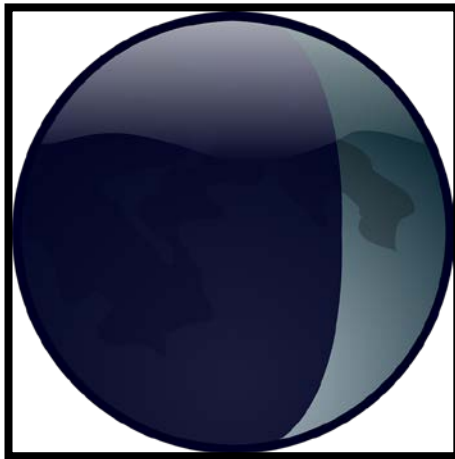
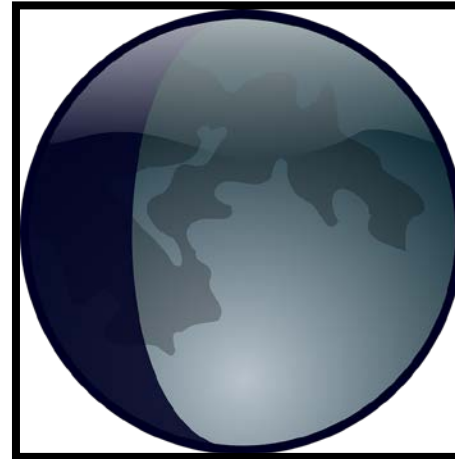
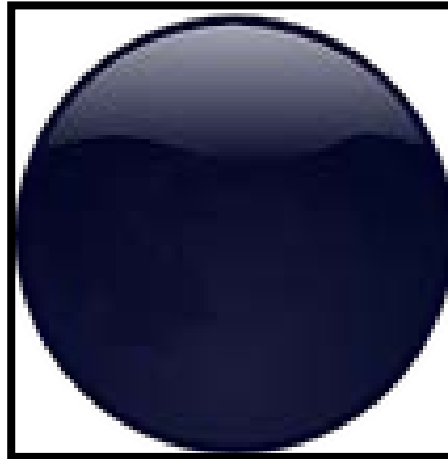


Lunar Cycle Diagram

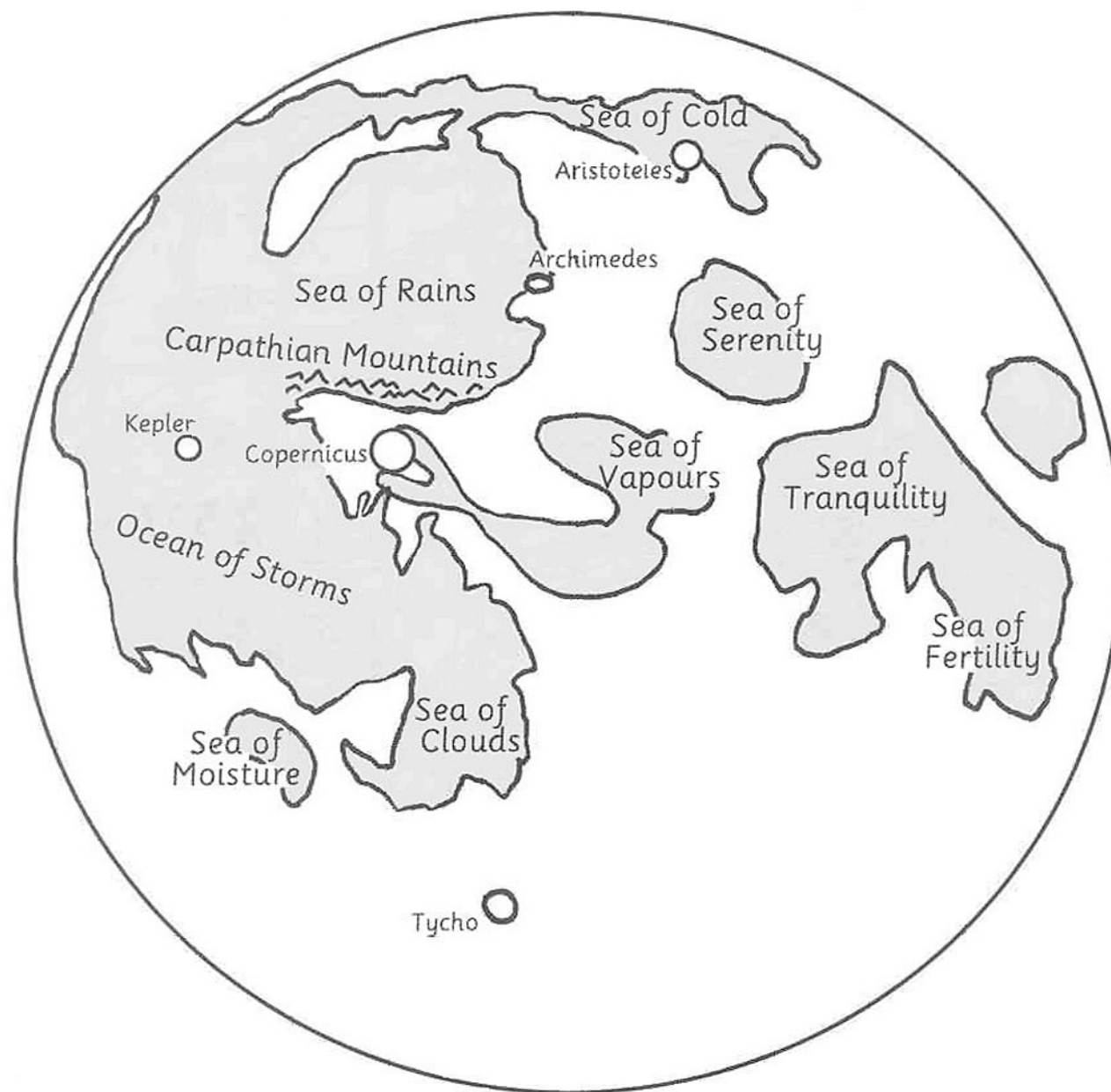
1. Cut this out and put it in the centre of an A3 page, then carry out your moon month investigation.



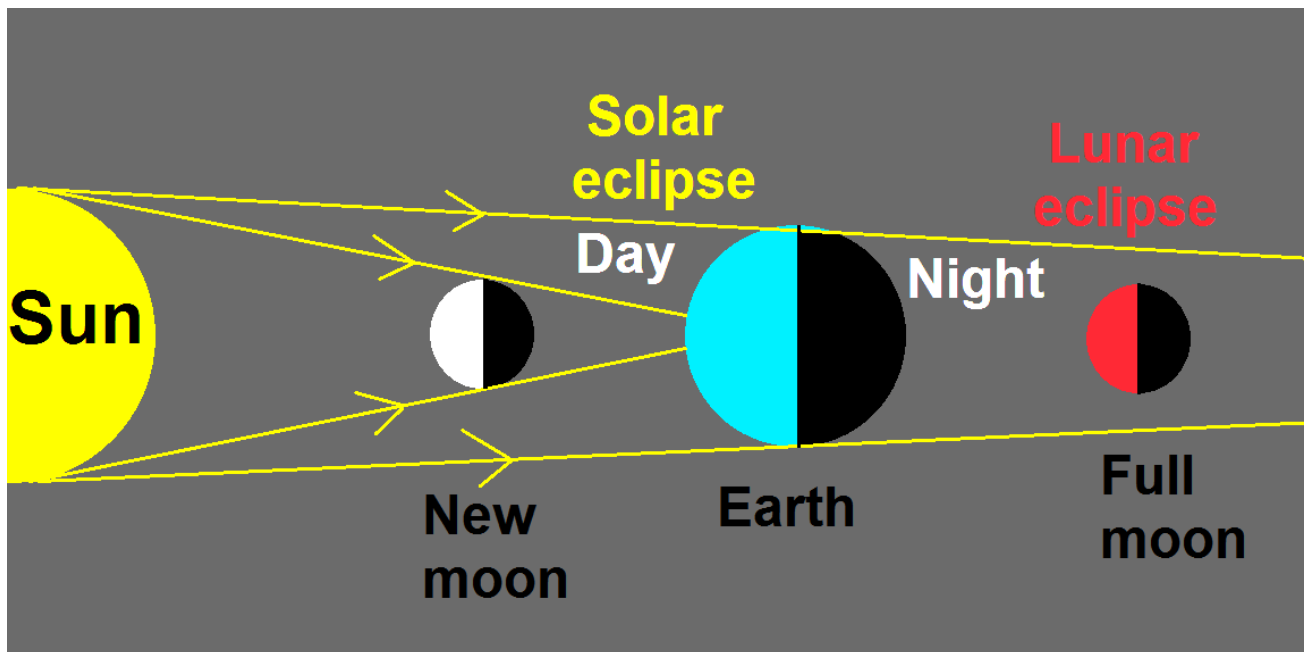
2. Cut each moon out and stick it next to the relative moon position on the lunar cycle diagram then use the lunar moon reference sheet to give you the names of each phase.



Map of the Moon



Lunar and solar eclipses



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<https://commons.wikimedia.org/w/index.php?curid=36147996>

Possible websites for moon and tide research

http://www.ducksters.com/science/earth_science/ocean_tides.php

http://www.bbc.co.uk/norfolk/kids/astronomy/astronomy_for_kids_tides_feb_05.shtml

<http://mrnussbaum.com/space/tides/>

<http://www.onegeology.org/extra/kids/earthprocesses/tides.html>