

Worksheet 2

Cell 13

The Lunar Effect

'On the fourth day the Professor, through the window of his cell, spoke to the guard outside. "What day of the month is it?" he asked. "The fifteenth," was the answer. The Professor made a mental astronomical calculation and satisfied himself that the moon would not rise until after nine o'clock that night.'

The moon has fascinated people for thousands of years. Did you know that people in ancient times believed the moon to be the centre of the universe? We now know that the moon we see in the night sky orbits our earth only and is simply one of many known moons in the Solar System.

Task 1: Use the following questions to complete a research project about the moon.

1. How often does the moon orbit the earth?
2. What is the distance between the moon and the centre of the earth?
3. How does the moon's orbit differ from most satellites of other planets?
4. How is the shape of the moon's orbit described?
5. What does the moon's elongation refer to?
6. What are the different phases of the moon?
7. How do the phases of the moon affect the ocean tides here on earth?
8. What is a lunar eclipse and when did it last occur?
9. Where are other moons known to be found in the Solar System?
10. Who first recorded their observations of the moon?

Task 2: Present your research to an appropriate audience in a creative way.

Extension Activities:

- Construct a 3 dimensional model demonstrating the moon's orbit around the earth.
- Research the moon landings. Construct a timeline of those who have travelled to the moon.
- Compose an argument text in response to the topic: *The moon landings were not real; they were an elaborate hoax.*