

Helping your children choose books they will love



Lovereading4kids.co.uk is a book website created for parents and children to make choosing books easy and fun

opening extract from
Mission to the Moon

written by
Alan Dyer

published by
Templar Publishing

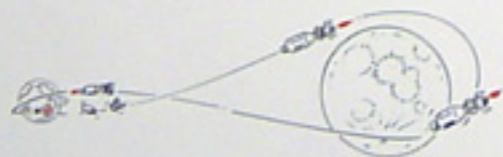
All text is copyright of the author and / or the illustrator

please print off and read at your leisure.

Contents

MISSION: MOON

The Moon and Us.....8	Journey to the Moon.....38
Moon Myths10	Touchdown40
Reaching for the Moon...12	Lunar Module.....42
The Space Race Begins..14	Exploring the Surface:
America Responds.....16	Apollo 1144
Machines to the Moon...18	Exploring the Surface:
Aiming for the Moon20	Later Missions46
The Cape22	On the Moon48
Selecting and Training	Spacesuit50
Astronauts.....24	Lunar Rover.....52
Practice in the Field.....26	Command Module Pilot..54
Apollo Chronology28	Splashdown56
Saturn V Rocket30	Apollo 13.....58
Countdown.....32	Moon Rock.....60
Lift Off!34	After Apollo62
Mission Control.....36	Back to the Moon?64
	Moon Base.....66



ALL ABOUT THE MOON

The Earth-Moon System..70
Phases of the Moon72
Moon Structure74
Surface Features76
Glossary.....78
Index.....80





Mission:
Moon



Moon Myths

For thousands of years the Moon has been seen as a place of myth and legend, of good and evil. The Sumerians who lived 4,500 years ago thought that the souls of the dead went to the Moon and descended to the underworld for judgement during the New Moon phase—when the Moon's face was completely in shadow and seemed to disappear into the darkness. Later cultures, such as the ancient Greeks and Romans, worshipped the Moon as the goddess of birth and fertility, and the protector of animals. Medieval superstitions claimed that the Moon's light caused "lunacy", or madness. Even today, people often blame "loony" behaviour on the Full Moon, but scientific studies have shown that there is no link.

Beyond the sky

This woodcut from the 1800s shows the earlier Medieval belief that the sky was the surface of a "celestial sphere" that lay like an upturned bowl on a flat Earth. Cosmic machinery behind the sphere was thought to keep the Moon, Sun and stars in motion.



NAMES OF THE MOON

The original Greek Moon goddess was Selene. In Roman mythology she was called Luna (from which we get our words "lunar" and "lunacy"), then was later known as Diana. However, NASA's Apollo Moon programme was named after the Greek god of light, truth and the Sun, Apollo was the twin brother of Artemis, another ancient Moon goddess.

Selene in Greece

The goddess Selene fell in love with the mortal Endymion, the first human to observe the cycles of the Moon. The gods placed him into an eternal sleep.

Baboon Moon

Thoth, the ancient Egyptian Moon god, was sometimes depicted as a white baboon because baboons "saw" to the Moon at night.



Moonwitches

Witches were believed to draw upon the power of the Moon goddess for conducting their wicked rituals.

Lunar werewolves

According to legend, werewolves change from human to howling wolf under the evil light of the Full Moon.



Arctic Moon

In Arctic tradition from ancient Mexico, the gods hurled a rabbit towards the newly created Moon and its unmarked face, creating the shapes we see today.



IMAGINING THE MOON

People have long looked at the Moon and seen mythological creatures drawn by the Moon's dark "seas". We now know that these seas are smooth lava plains.



Man in the Moon

People in Europe and North America see the face of a man in the Moon.



Moon man down under

From the southern hemisphere the Moon appears inverted, as a different face is seen.



Rabbit and egg

Anglo-Saxon myths tell of a rabbit carrying an egg, both symbols for life, birth and spring.



Witch in the Moon

In the 1500s people in England see a witch or an old man carrying a bundle of sticks.



Toad in the Moon

Chinese legends tell of a woman, Chang'e, who fled to the Moon and was turned into a toad.



Crab in the Moon

People living on islands in the South Pacific see an ocean crab in the Moon's markings.

Reaching for the Moon

Since the dawn of civilisation people around the world have used the monthly cycle of the Moon's phases to help count time and create a calendar. But they had little idea what the Moon actually was. A god? A glowing cosmic sphere? An unreachable part of heaven? It was not until the 1600s, when the Moon was first observed with telescopes, that people realised it was a world like Earth, with rugged mountains and volcanic plains, and close enough that we might reach it one day. That dream became the ultimate goal of inventors in the early 1900s, who knew that the only way to reach the Moon was to propel through space with rockets.

Ptolemy's cosmos
Ancient Greek astronomer Ptolemy concluded that all worlds revolved around Earth. In his time the heavens, Moon and planets were thought to be made of a substance called "quintessence".

EXPLORING A NEW WORLD

For hundreds of years people thought the Moon might be a smooth mirror reflecting an image of Earth's continents. From 1609, with the invention of the telescope, astronomers could finally see the Moon close-up. They realised it was another world with mountains and plains just like Earth. They began to map the Moon and name these features.

Copernicus

In 1543 the Polish astronomer Nicholas Copernicus challenged centuries of thinking. He proposed that Earth and the other planets revolved around the Sun, and only the Moon orbited Earth.

First Moon maps

In 1609 Italian Galileo Galilei became the first person to study the Moon through a telescope. He sketched these images to record the mountains and craters that he saw.



Charting lunar seas

In 1647 the astronomer Johannes Hevelius, pictured here with his telescope, published a map of the Moon that showed the dark areas as watery seas.



AIM FOR THE MOON

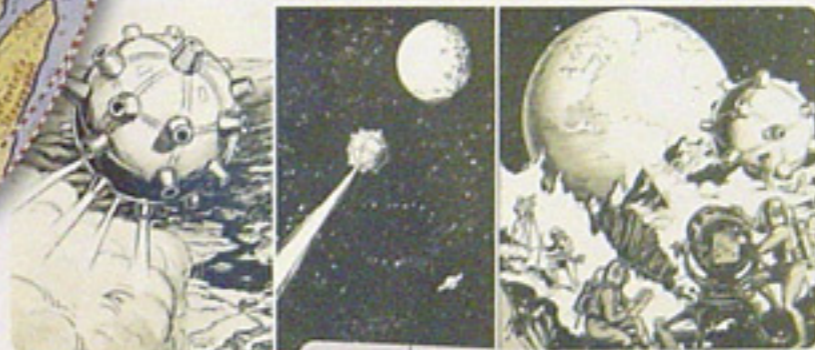
By the late 1800s writers began to imagine ways we could travel to the Moon, though by then people realised the Moon was airless and lifeless.

Moon mission, 1865

French writer Jules Verne, in his novel *From the Earth to the Moon*, imagined three astronauts propelled to the Moon in a capsule launched from Florida. This was a remarkable prediction that came true a century later.

Moon mission, 1935

This comic strip shows astronauts flying to the Moon then sending signals back to Earth with a powerful searchlight.



ROCKET SCIENCE

By the 1900s people knew that fuel would not burn in airless space, so the only way to travel to the Moon was to use a rocket that carried its own oxygen supply.



Rocket pioneers

In the early 1900s Konstantin Tsiolkovski in Russia, left, and Robert Goddard in the United States, above, designed the first liquid-fueled rockets, but only Goddard flew them.



War rockets

Captured by Allied troops at the end of World War II, Nazi V-2 rocket missiles were the first rockets used in the American and Soviet space programmes.

