

WORLD HISTORY READERS

Level 3-1

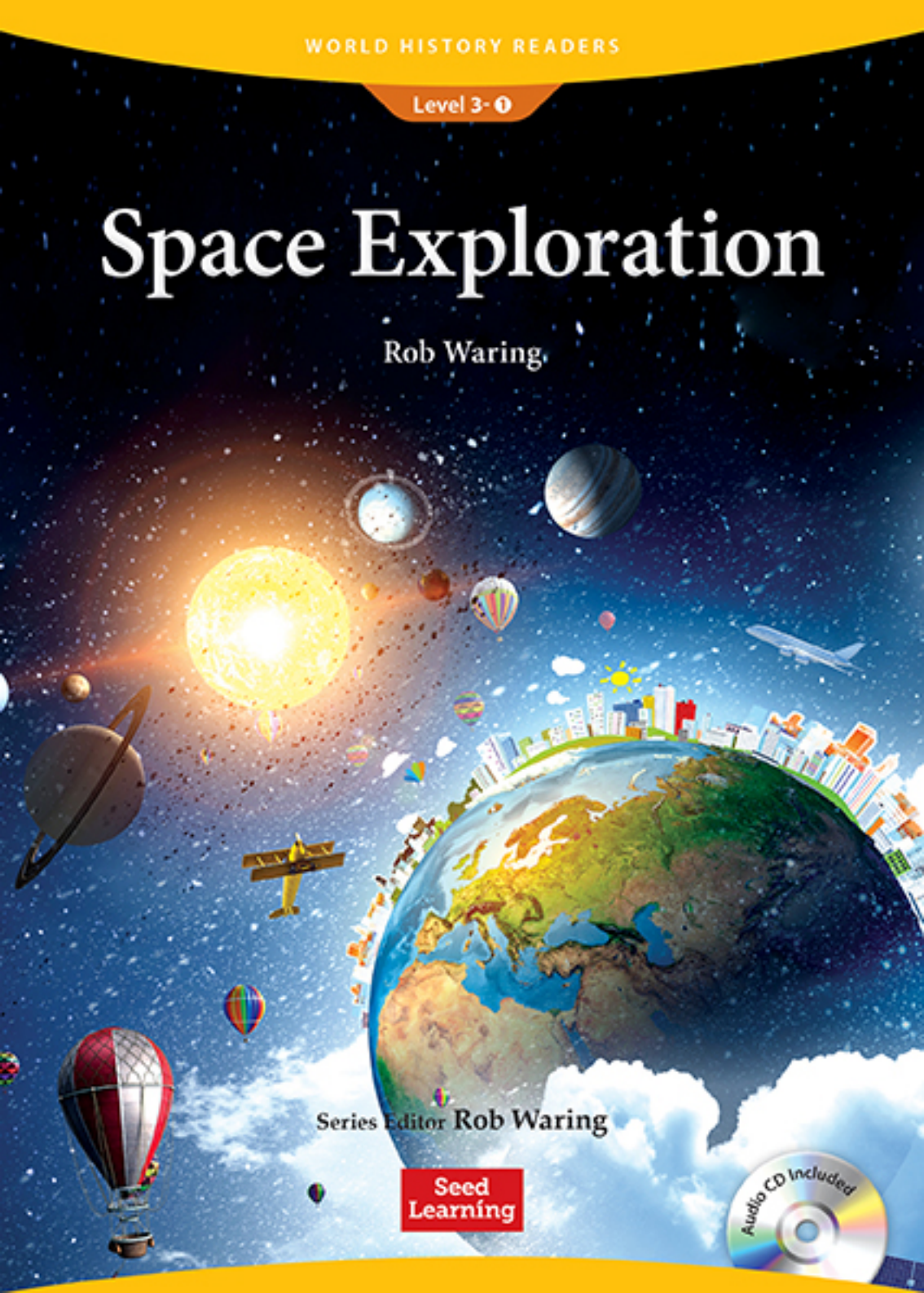
Space Exploration

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Seed
Learning

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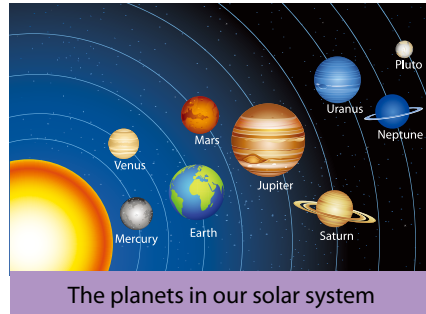
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The Night Sky

Since the beginning of human history, we have looked up at the stars and wondered...

What are those lights in the sky? Why do the moon and the sun set? Can we go and touch them?

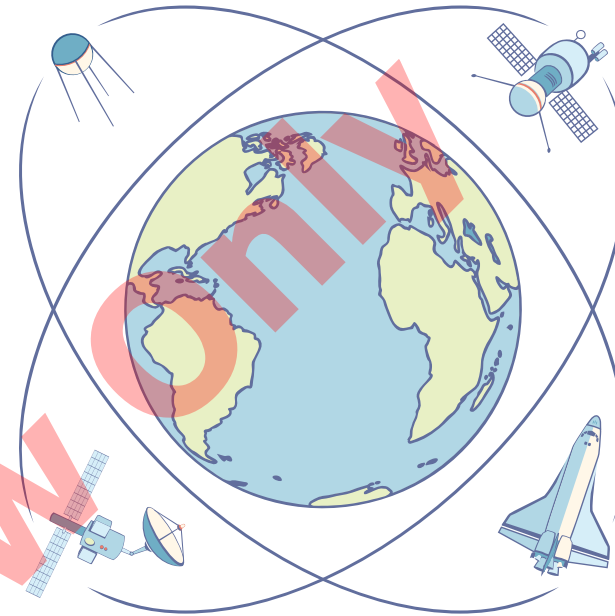


The planets in our solar system



The sunset and the moon

Looking at the night sky



Man-made technology orbiting our planet

We have known how to make rockets for hundreds of years. The Chinese used them for making war and for ceremonies.



Chinese fireworks at New Year

However, none of these rockets were powerful enough to leave our planet and go into orbit.

An ancient Chinese rocket



The Early 20th Century

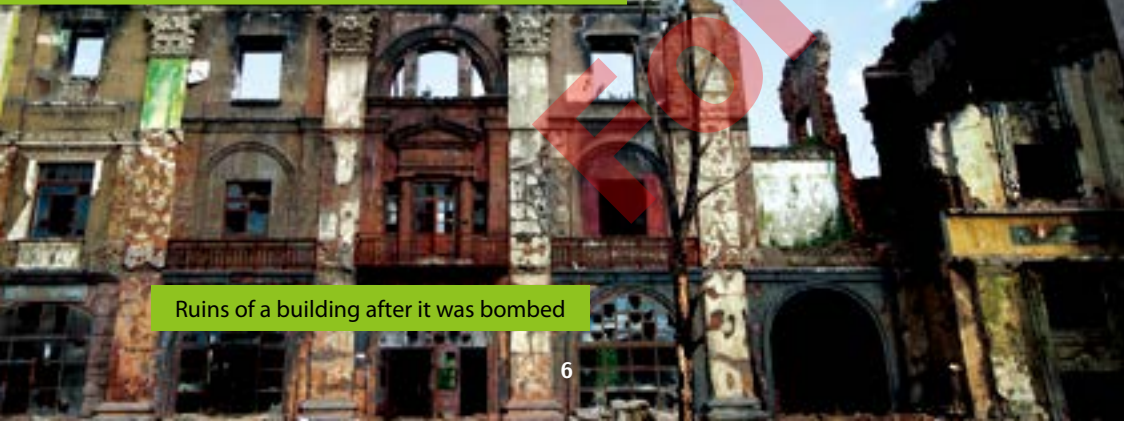
In the 1930s and 1940s, the Germans used long-range rockets during WWII. Some of their rockets could fly a distance of 320 km while reaching a height of 90 km into the air, at 5,700 km per hour. Scientists believed these designs could be used for space travel.



The first jet plane



The German V2 rocket



Ruins of a building after it was bombed

The Cold War

In the 1950s and 1960s, there were two world superpowers—the Soviet Union, modern-day Russia, and the United States of America. They had very different ideas about politics and wanted power in all corners of the world.



A space poster

They also wanted to be first into space, so they could show off their technologies and power.



A Soviet space clock

A symbol of the Cold War



Satellites

In 1957, the Soviet Union put the first satellite into space, Sputnik 1.

Soon after, in 1958, the Americans had their own satellite in space, Explorer 1.



Sputnik 1, the first satellite



Explorer 1 carried scientific instruments into space.



Explorer 1, the first American satellite

Yuri Gagarin

In 1961, the Russian Yuri Gagarin was the first man to go into space. His flight was only 108 minutes long, but he went 327 km from Earth.



A replica of John Glenn's spacecraft, 1962

In 1962, John Glenn was the first American to go into space. But America did not like being second.



A news report of Yuri Gagarin's flight



The Apollo Saturn V rocket getting ready for launch

Comprehension Questions

1. ...made rockets hundreds of years ago.
 - (a) The Chinese
 - (b) The Americans
 - (c) The Germans
 - (d) The Russians
2. The first long-range rockets were developed for...
 - (a) fireworks.
 - (b) space.
 - (c) war.
 - (d) flying to the moon.
3. Which countries were superpowers in the 1950s and 1960s?
 - (a) Germany and America
 - (b) America and Japan
 - (c) The Soviet Union and America
 - (d) The Soviet Union and Germany
4. Who put the first satellite into space?
 - (a) The Germans
 - (b) The Soviets
 - (c) The Americans
 - (d) All of the above
5. Who put the first man on the moon?
 - (a) The Germans
 - (b) The Soviets
 - (c) The Americans
 - (d) All of the above
6. Which was the first to go to space?
 - (a) The International Space Station
 - (b) The first space shuttle
 - (c) The Hubble Space Telescope
 - (d) Skylab
7. What was new about the space shuttles?
 - (a) They could land back on Earth.
 - (b) Astronauts could live on them.
 - (c) They were the size of football fields.
 - (d) They flew together.
8. What did SpaceShipOne do?
 - (a) Won \$10 million
 - (b) Returned to space three times within three weeks
 - (c) Was the second private company in space
 - (d) All of the above
9. Which of these are reasons some people say we should go to Mars?
 - (a) Humans may die from illness.
 - (b) We use too many resources.
 - (c) An asteroid may kill us.
 - (d) All of the above
10. Which reason is given for why we should not go into space?
 - (a) It is expensive.
 - (b) It is cold.
 - (c) It is boring.
 - (d) We learn very little.

Glossary

- **astronaut** a person who travels into space
- **decade** ten years
- **develop** to improve and become better
- **explore** to look for new things; to discover
- **fleet** a group of ships or spacecraft
- **flight** the act of flying
- **launch** to send a spacecraft into the sky
- **mission** an important job, usually traveling somewhere
- **orbit** to go around in circles at the same distance
- **planet** a large, round object in space such as Earth or Mars
- **remote landing vehicle** a small car-like device that moves itself across the surface of a planet
- **research laboratory** a place to do scientific study
- **satellite** a piece of equipment that is sent into space that can get and send signals
- **spacecraft** a vehicle that travels in space
- **space probe** a small spacecraft, with no one traveling in it, that sends back information to scientists on Earth

Key 1. (a) 2. (c) 3. (c) 4. (b) 5. (c) 6. (d) 7. (a) 8. (a) 9. (d) 10. (a)