## In the Name of God

## **Chapter 4: A brief history of space exploration**

## How do you scan the passage?

## Follow my roadmap and apply this technique to your reading practices!

Timeline	Space exploration discoveries
20 <sup>th</sup> century	• Space exploration: A long-held dream fulfilled in the second half of the 20 <sup>th</sup> century
	How? Rockets overcoming gravity to reach orbital velocity
	• Three countries simultaneously concentrated on designing rocket engines for spaceflight purposes
1930s, 1940s	Nazi Germany used long-distance rockets as weapons
19308, 19408	World War II: Germany attacked England
	• Missiles could go as far as 200 miles, as high as 60 miles, and as speedy as 3500 miles per hour.
1957	The Soviets launched the first artificial satellite, Sputnik 1
1958	The 1st U.S. satellite, Explorer 1, went into orbit
1960s	Unmanned spacecraft photographed and probed the moon before human landing
1961	• Vostok 1 mission: Yuri Gagarin (Russian astronaut) was the 1 <sup>st</sup> human orbiting the Earth (length of flight: 108 minutes / altitude of 327 kilometers)
	Alan Shepard was the first American who flew into space
	John Kennedy set a national goal: Landing human on the moon
1962	John Glenn's historic flight: The 1st American orbiting the Earth

1969	Neil Armstrong stepped onto the moon
1969-1972	Six Apollo missions for exploring the moon
Early 1970s	• Mariner spacecraft: Orbiting and mapping the surface of Mars
1070	Voyager spacecraft: Sending detailed images of Jupiter and Saturn
1970s	Skylab: America's first space station
	• Apollo Soyuz project: First international (American and Russian) space
	mission
1980s	Communication Satellite discoveries:
	Ozone hole, forest fires, nuclear power-plant disaster in Chernobyl
1001	Astronomical satellites discoveries: Finding new stars
1981	• Shuttle Columbia: Reusable shuttle for civilian and military space
	missions
	• Up to 1986: 24 successful shuttle launches
1986	Shuttle Challenger: Tragedy
	Shuttle <b>exploded</b> after launch and killed its <b>crew of seven</b>
1986-present	Reevaluation of space program
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