# Space Science SPACE EXPLORATION



# A DATE WITH SPACE ANSWER KEY TIMELINE

# 1942

The first large-scale rocket (the V2) leaves the Earth's atmosphere and enters space. This rocket was the precursor to modern day rockets.

### 1947

Fruit flies were the first animal to be launched into space.

# 1957

The Soviet Union launches Sputnik 1, the first satellite to orbit the Earth. The space race between the USSR and the USA begins.

# 1957

Laika the dog becomes the first animal to orbit Earth (in the satellite, Sputnik 2).

#### 1961

Russian cosmonaut Yuri Gagarin becomes the first man in space. He orbits the earth once.

#### 1963

Valentina Tereshkova becomes the first woman in space. She orbits the Earth 48 times.

# 1965

Mariner 4 flies by Mars to return the first photos of the Martian surface.

#### 1969

Apollo 11 astronauts Neil Armstrong and Buzz Aldrin become the first men to walk on the moon. Their colleague, Michael Collins, stays aboard the spacecraft.

#### 1970

Venera 7 successfully lands on Venus and becomes the first man-made spacecraft to return data from another planet. It is destroyed by the atmosphere on Venus after only 55 minutes.

#### 1973-4

Mariner 10 flies by Mercury and Venus. It was the first spacecraft to use the gravitational pull of one planet (Venus) to reach another planet (Mercury). It is also the first spacecraft to visit two planets.

# 1977

Voyager 2 begins its tour of the outer planets—Jupiter, Saturn, Uranus and Neptune. It sends back images of the planets and their satellites during its long voyage. It reaches Neptune in 1989.

#### 1986

Mir Space Station is launched and becomes the first long-term research space station. It continues to operate until 2001.

#### **1990**

Hubble is deployed by the space shuttle Discovery. Hubble's telescope and other technology sends back photographs of celestial objects at different wavelengths of light.

#### 2000

The International Space Station (ISS) hosts its first permanent crew in 2000. Launched in 1998, this facility is still used by scientists from all partner nations to conduct research.

#### 2001

Canadarm 2 is installed on the ISS. It helps in construction and maintenance of the research station.

#### 2004

Launched in 2003, the rovers, Spirit and Opportunity land on Mars. Designed to last for 90 days, these two rovers have sent back data about the Red Planet for years. A third Mars rover, Curiosity, landed in 2012 to begin its work.