

Celestial Chronology: Days and Months in Space

Days & Months · Answer Key · 12 Questions

1. Which planet in our solar system has the longest day (rotation period)?

- A) Jupiter
- B) Venus**
- C) Mercury
- D) Saturn

2. A sidereal day on Earth, the time it takes to complete one rotation relative to distant stars, is approximately how long?

- A) 24 hours
- B) 23 hours, 56 minutes, and 4 seconds**
- C) 12 hours
- D) 25 hours

3. Which gas giant has the shortest day, completing a rotation in less than 11 hours?

- A) Saturn
- B) Uranus
- C) Neptune
- D) Jupiter**

4. The definition of a lunar month is based on the time it takes for the Moon to complete one cycle of phases as seen from Earth, which is approximately how many days?

- A) 27.3 days
- B) 29.5 days**
- C) 30 days
- D) 31 days

5. Mars has a day (sol) that is very similar in length to Earth's, lasting approximately how long?

- A) 20 hours
- B) 22 hours
- C) 24 hours and 39 minutes**
- D) 26 hours

6. Due to its extreme axial tilt, Uranus experiences very long periods of daylight and darkness at its poles, lasting for approximately how many Earth years?

- A) 10
- B) 21**
- C) 42
- D) 84

7. Which of these planets has a retrograde rotation, meaning it spins in the opposite direction to most other planets?

A) Mars

B) Venus

C) Mercury

D) Neptune

8. The year on Mercury is significantly shorter than its day. A Mercury year lasts approximately how many Earth days?

A) 59 Earth days

B) 88 Earth days

C) 120 Earth days

D) 180 Earth days

9. The 'month' on Earth is not perfectly aligned with the Moon's orbital period (sidereal month). The synodic month (from new moon to new moon) is about how many days longer than the sidereal month?

A) 1 day

B) 2 days

C) 2.2 days

D) 3 days

10. Pluto's rotation is tidally locked with Charon, its largest moon. This means Pluto's day is the same length as its orbital period around the Sun, which is approximately how many Earth days?

A) 6.4 Earth days

B) 248 Earth days

C) 1.3 Earth days

D) 153 Earth days

11. The concept of a 'week' is largely a human construct, but its origins are often traced to Babylonian astronomy and the seven known celestial bodies visible to the naked eye (Sun, Moon, Mars, Mercury, Jupiter, Venus, and which other planet)?

A) Earth

B) Saturn

C) Uranus

D) Neptune

12. Jupiter's rotation is so rapid that its day lasts less than 10 hours. This rapid rotation contributes to its distinct shape, which is not a perfect sphere but rather:

A) A cube

B) An oblate spheroid

C) A triangular prism

D) A flattened disc