

Solar Eclipses: A Comprehensive Guide (2021-2030)

Astronomy · Practice Test · 19 Questions

1. What is the period of the Saros cycle?

- A) Approximately 18 years 11 days
- B) Exactly 10 years
- C) Approximately 5 years 6 months
- D) Approximately 28 days

2. Which column in the table lists the type of eclipse (Total, Annular, Hybrid, Partial)?

- A) Calendar Date
- B) TD of Greatest Eclipse
- C) Eclipse Type
- D) Saros Series

3. What does 'TD of Greatest Eclipse' represent?

- A) The time the eclipse is visible from a specific location
- B) The terrestrial dynamical time when the Moon's shadow axis is closest to Earth's center
- C) The duration of the eclipse in minutes
- D) The geographical region where the eclipse is seen

4. For total and annular eclipses, what information is provided in the 'Central Duration' column?

- A) The duration of the partial phase of the eclipse
- B) The length of the eclipse as seen from the central line at greatest eclipse
- C) The time it takes for the Moon to cross the Sun
- D) The time between successive eclipses in a Saros series

5. What type of eclipse occurred on December 4, 2021?

- A) Annular
- B) Total
- C) Hybrid
- D) Partial

6. Which eclipse in 2023 was a Hybrid type?

- A) April 20
- B) October 14
- C) April 20 and October 14
- D) None

7. Where was the total solar eclipse of April 8, 2024 primarily visible?

- A) Antarctica and S. Africa
- B) Europe and Asia
- C) N. America and C. America
- D) Pacific Ocean and S. America

8. What is the magnitude of the total solar eclipse on April 8, 2024?

- A) 0.933
- B) 1.057
- C) 0.963
- D) 1.039

9. Which eclipse in the table had the longest Central Duration?

- A) October 2, 2024
- B) January 26, 2028
- C) February 6, 2027
- D) October 14, 2023

10. What does the 'Eclipse Magnitude' value represent for total and annular eclipses?

- A) The fraction of the Sun's area obscured
- B) The ratio of diameters between the Moon and the Sun
- C) The percentage of the Sun's light blocked
- D) The duration of totality in seconds

11. How can you view a map of an eclipse's visibility?

- A) By clicking on the Eclipse Type
- B) By clicking on the Calendar Date
- C) By clicking on the Saros Series
- D) By clicking on the Central Duration

12. What colors represent the path of the Moon's penumbral shadow on an eclipse map?

- A) Blue/Red
- B) Cyan and Magenta
- C) Yellow
- D) Green

13. What feature allows you to pan and zoom along an eclipse track?

- A) Global Map
- B) Saros Table
- C) Interactive Google Map
- D) Eclipse Bulletin

14. Where can you find tables of geographic coordinates for the paths of central eclipses?

- A) Through the Eclipse Type link
- B) Through the Central Duration link
- C) By clicking on the Calendar Date
- D) By clicking on the Saros Series

15. What is the approximate size range for animated GIF files of shadow movements?

- A) 10 KB to 50 KB
- B) 40 KB to 175 KB
- C) 200 KB to 500 KB
- D) 60 KB to 100 KB

16. Which eclipse on February 17, 2026, was visible in s Africa and Antarctica?

- A) Total
- B) Annular
- C) Hybrid
- D) Partial

17. What is the Central Duration of the total solar eclipse on August 12, 2026?

- A) 02m18s
- B) 06m23s
- C) 05m10s
- D) 03m44s

18. Which eclipse on August 2, 2027, had the highest Eclipse Magnitude listed?

- A) 1.039
- B) 1.079
- C) 1.056
- D) 1.047

19. The solar eclipse on January 26, 2028, was visible in which regions of the Americas?

- A) Only N. America
- B) Only S. America
- C) e N. America, C. & S. America
- D) w N. America, C. & S. America