

Eclipse Vocabulary Fill-in-the-Blank Worksheet Part I

1. A _____ is an optical instrument designed to make distant objects appear nearer and contains an arrangement of lenses, or of curved mirrors and lenses, by which rays of light are collected, focused, and the resulting image magnified.
2. An instrument showing the time by way of the sun shining on a gnomon, which casts a shadow on a surface marked with the hours of the day is called a _____.
3. _____ stands for Before the Common Era, used to refer to the years that came before the birth of Jesus Christ.
4. The "People of the Longhouse," also referred to as the Iroquois or the Six Nations, or preferably the _____, are members of a confederacy consisting of the Seneca, Cayuga, Oneida, Onondaga, Mohawk and Tuscarora tribes.
5. An ancient time-measuring device worked by a flow of water is called a _____.
6. A _____ is a piece of glass or other transparent substance with curved sides for concentrating or dispersing light rays.
7. A thin rod which casts a shadow onto the face of a sundial is called a _____. This is a Greek word, which means pole.
8. The portion of the moon's shadow in which only part of the sun is covered is called the _____. An observer standing in this area only sees only a partial solar eclipse.
9. _____ was an Italian mathematician called the father of observational astronomy, modern-era classical physics, the scientific method, and modern science.
10. _____ marks the maximum phase of a total solar eclipse, during which the moon completely covers the sun. It can last from a fraction of a second to a maximum of 7 minutes and 31 seconds.
11. _____ is Latin for "shadow". In the context of eclipses, it is the region of space where an observer sees the one object block the other's light completely. For a solar eclipse, for instance, any observer in this zone will see the sun covered completely by the moon.
12. The track of the Moon's shadow across Earth's surface during a Total Solar Eclipse is called the _____. This path is typically about 10,000 miles long but only 100 miles wide. In order to see the sun totally eclipsed by the moon, you must be in this zone.

A. Penumbra

B. Sundial

C. Totality

D. Umbra

E. Galileo Galilei

F. Gnomon

G. Haudenosaunee

H. BCE

I. Clepsydra

J. Path of Totality

K. Telescope

L. Lens

KEY: 1. K 2. B 3. H 4. G 5. I 6. L 7. F 8. A 9. E 10. C 11. D 12. J

Eclipse Vocabulary Fill-in-the-Blank Worksheet Part II

13. A solar eclipse where the apparent diameter of the moon is too small to completely cover the sun is an _____. At mid-eclipse, the sun appears as a blindingly bright ring around the moon.
14. _____ is a gaseous element named after Helios, the Greek god of the sun. It was first detected in sunlight during a solar eclipse.
15. The gaseous envelope of the sun and other stars is the _____. The sun's is normally visible only during a total solar eclipse, when it is seen as an irregularly shaped pearly glow surrounding the darkened disk of the moon.
16. The curved path of a celestial object or spacecraft around a star or planet is called an _____.
17. When light _____, it bends as it passes through a clear medium such as water, air, plastic, or glass.
18. A celestial body moving in an elliptical orbit around a star is called a _____.
19. An eclipse cycle with a period of 6,585.32 days (or 18 years and 10.3 days) is called a _____. When two eclipses are separated by a period of one of these, the sun, earth, and moon return to approximately the same relative geometry, and a nearly identical eclipse will occur (though the eclipse path will be shifted west by eight hours- one third of Earth's rotation).
20. _____ is the lunar phase when the moon is located in the same direction in the sky as the Sun. This is the only lunar phase during which an eclipse of the sun can occur.
21. A type of solar eclipse where the Moon covers only a portion of the Sun is called a _____. This precedes and follows totality or annularity, but can also occur by itself. This type of eclipse is visible over a wider swath of Earth than is totality or annularity.
22. _____ is a type of solar eclipse where the apparent diameter of the moon is large enough to completely cover the sun's photosphere (even if only momentarily) and reveal the faint solar corona.
23. A traditional story, especially one concerning the early history of a people or explaining some natural or social phenomenon, and typically involving supernatural beings or events, is a _____.
24. _____ is the alignment of three or more objects in space. A solar eclipse could not happen without one of these.

M. Total Eclipse

N. Helium

O. Refracts

P. Syzygy

Q. Partial Eclipse

R. Orbit

S. Annular Eclipse

T. Corona

U. Myth

V. Planet

W. Saros Cycle

X. New Moon

KEY: 13. S 14. N 15. T 16. R 17. O 18. V 19. W 20. X 21. Q 22. M 23. U 24. P