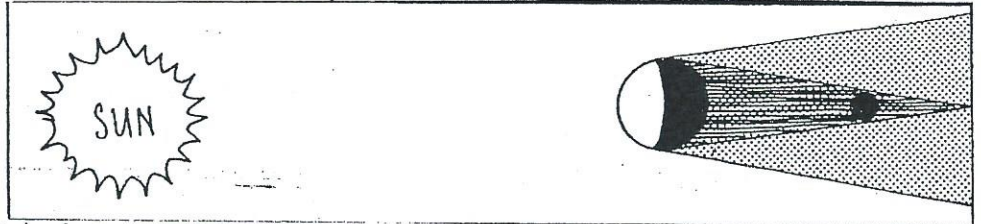
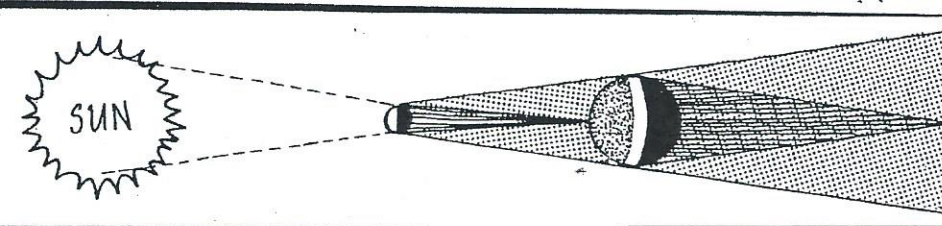


Casting Shadows

Instructions: Label the diagrams below solar eclipse or lunar eclipse. Label Earth, moon, umbra and penumbra on each diagram.



Have you ever seen the sun disappear? Or watched an eerie shadow move across the moon? Imagine what it was like for primitive people when the sky suddenly fell dark in the middle of the day! When three celestial objects fall into alignment, some great shadows are the result. These shadows are called eclipses of the moon or sun, and they are pretty spectacular to watch! These eclipse-watchers have written down some information about eclipses. Do they have all their facts straight? Write T (true) or F (False) next to each statement.

- ___ 1. A solar eclipse occurs when Earth falls between the sun and the moon.
- ___ 2. All eclipses are visible.
- ___ 3. All eclipses are total.
- ___ 4. The umbra is the inner part of the shadow.
- ___ 5. Eclipses of the sun occur 2-4 times a year.
- ___ 6. A lunar eclipse occurs when the moon travels through the shadow of Earth.
- ___ 7. There are about 2 lunar eclipses a year.
- ___ 8. A lunar eclipse can take place only when the moon is full.
- ___ 9. A total solar eclipse lasts a few minutes.
- ___ 10. In a solar eclipse, no sunlight penetrates the umbra.
- ___ 11. A total lunar eclipse occurs when the moon passes through Earth's penumbra.
- ___ 12. Partial lunar eclipses occur more often than total eclipses.
- ___ 13. A solar eclipse may last over 3 hours.
- ___ 14. A total solar eclipse is visible at all spots on Earth.
- ___ 15. All lunar eclipses are total.
- ___ 16. In a total solar eclipse, the moon completely covers the sun.
- ___ 17. Lunar eclipses occur every 3 years.
- ___ 18. A lunar eclipse may last over 3 hours.
- ___ 19. The penumbra is the outer part of the shadow.
- ___ 20. When the sun's disk is covered in an eclipse, the corona is still visible.