

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

**The Moon – *Solar and Lunar Eclipses* Study Guide**  
Astronomy



**Nerd Words:**

1. Linear Diameter –
2. Small Angle Formula –
3. Apogee –
4. Perigee –
5. Lunar Eclipse –
6. Umbra –
7. Penumbra –
8. Total Lunar Eclipse –
9. Totality –
10. Partial Lunar Eclipse –
11. Penumbral Lunar Eclipse –
12. Solar Eclipse –

13. Total Solar Eclipse –

14. Partial Solar Eclipse –

15. Annular Eclipse –

16. Eclipse Season –

**Review:**

1. What two measurements are needed for the small angle formula? Why these ones?
2. What is the angular diameter of the Moon and the Sun? Why is this important to know for eclipses? Explain.
3. Compare and contrast apogee and perigee.
4. Draw a diagram to show a lunar eclipse.
5. Compare and contrast an umbra and a penumbra. Why is it important to know the difference?
6. What color will the Moon turn during an eclipse? How do we know the Moon has reached totality?
7. The dimming of an eclipse is usually due to what three factors?
8. What is the difference between a partial and penumbral lunar eclipse?

9. Describe what a partial and solar eclipse would look like in the sky. Draw a diagram for each to HELP explain your answer.
  
10. How is an annular eclipse different from a total solar eclipse? Explain.
  
11. How long do solar eclipses usually last? Lunar? Explain.
  
12. Why is it dangerous to watch solar eclipses?
  
13. How long is the eclipse season and what phases do the Moon need to be in during this time to get an eclipse to take place?