Prep Sheet for

Part Two: Moon Phases, Tides, & Eclipses

Name _____

Date _____

Period _____

MOON PHASES:

1. How long is a day on the moon? How long is a year on the moon?
2. Why does the moon appear to shine?
3. What is causing the shadow on the moon?
4. When seen from space, what percentage of the moon is lit up?
5. Describe, in detail, what causes the phases of the moon. (a complete answer describes three reasons)
6. What **phase** of the moon occurs when Earth is between the Sun and Moon?
7. How long does it take for the moon to go through all its phases once?
8. Describe what a new moon looks like and what causes it to occur.
9. What is the difference between a waning moon and a waxing moon?

TIDES:

10. What causes the tides?
11. Compare and contrast a spring tide and a neap tide.
12. Draw a diagram showing the alignment of SEM during spring tides and neap tides.
13. List two reasons why knowing the tide schedule for an area might be important.

ECLIPSES:

14. The entire Earth is not able to see a solar eclipse each time it happens. Part of the reason is that it is night for half the world. *What is the other reason?*
15. Draw and label the side view for a solar eclipse. (Pretend you are in outer space looking at how things l line up.) Be sure to label space objects and shadows.
16. Draw and label the side view for a lunar eclipse. (Pretend you are in outer space looking at how things line up.) Be sure to label space objects and shadows.
17. Why aren't there eclipses every month?
18. Describe the difference between an umbra and penumbra.
19. During what phase does a solar eclipse happen?
20. During what phase does a lunar eclipse happen?