

Name: _____

Using your guided notes, answer the following questions about the moon.

Atmosphere and Surface Features

1. Why are there no gas particles, and therefore no atmosphere, on the moon?
2. What is the average surface temperature of the moon in direct sunlight?
3. What is the average surface temperature of the moon at night?
4. Why is there no liquid water on the moon?
5. Where is ice located on the moon?
6. What are maria?
7. What are lunar highlands?
8. Much of the moon's surface is covered with impact _____.
9. What are craters?
10. What are meteoroids?
11. What happened to craters on Earth?
12. Using information from the last question, why do so many craters still exist on the moon?

Formation of the moon

1. Explain how the moon was formed. (Use words such as forming, Mars-sized object, collided, ejected, orbited)

Phases of the Moon

1. What causes the phases of the moon?
2. The moon cannot produce its own light, so where does the light come from?
3. True or False: The moon always appears the same in the night sky?
4. What are phases?
5. Sunlight illuminates _____ of the moon.
6. The phase of the moon is dependent on one thing, what is it?
7. PHASES OF THE MOON – go to page 803 in your textbook to help with this section if the picture in your guided notes is not clear enough
 - a. New Moon – The _____ side faces _____ from Earth.
 - b. Waxing crescent – The moon is waxing, or _____.
 - c. First Quarter – The moon has completed one _____ of its cycle.
 - d. Waxing gibbous – The moon continues to _____.
 - e. Full Moon – The entire _____ side _____ Earth.
 - f. Waning gibbous – The moon is waning, or _____.
 - g. Third Quarter – The moon has completed three _____ of its cycle.
 - h. Waning crescent – The moon continues to _____.
 - i. The whole process starts back over again.
8. How long does it take for the moon to complete a full cycle of phases?
9. What is this period of time called?

Eclipses

1. What is an eclipse?
2. What must happen for an eclipse to occur?
3. Why don't eclipses occur every month?
4. When is the only time that an eclipse will occur?
5. What is a solar eclipse?
6. What is the umbra?
7. The umbra _____ blocks out the sun.
8. How many people see the umbra?
9. What is the penumbra?
10. People within the penumbra see a _____ solar eclipse.
11. What is a lunar eclipse?
12. When would you see a total lunar eclipse?
13. When would you see a partial lunar eclipse?

Tides

1. What are tides?
2. What causes tides?
3. The gravitational force of the moon pulls more _____ on the side of Earth that _____ it, and less _____ on the side that is _____ from it.
4. What does the difference in gravitational pull cause?
5. Where is this effect greater: solid land or oceans?
6. The gravitational pull of the moon causes the oceans to _____ at the locations closest to and farthest from it.
7. When do high tides occur?
8. How many high tides and low tides occur each day?
9. How much effect does the sun have on the tides?
10. During _____ tides the pulls of the _____ and sun _____ together.
11. Describe what happens during this tide.
12. During _____ tides, the moon and sun pull Earth and its oceans at _____ angles.
13. Describe what happens during this tide.