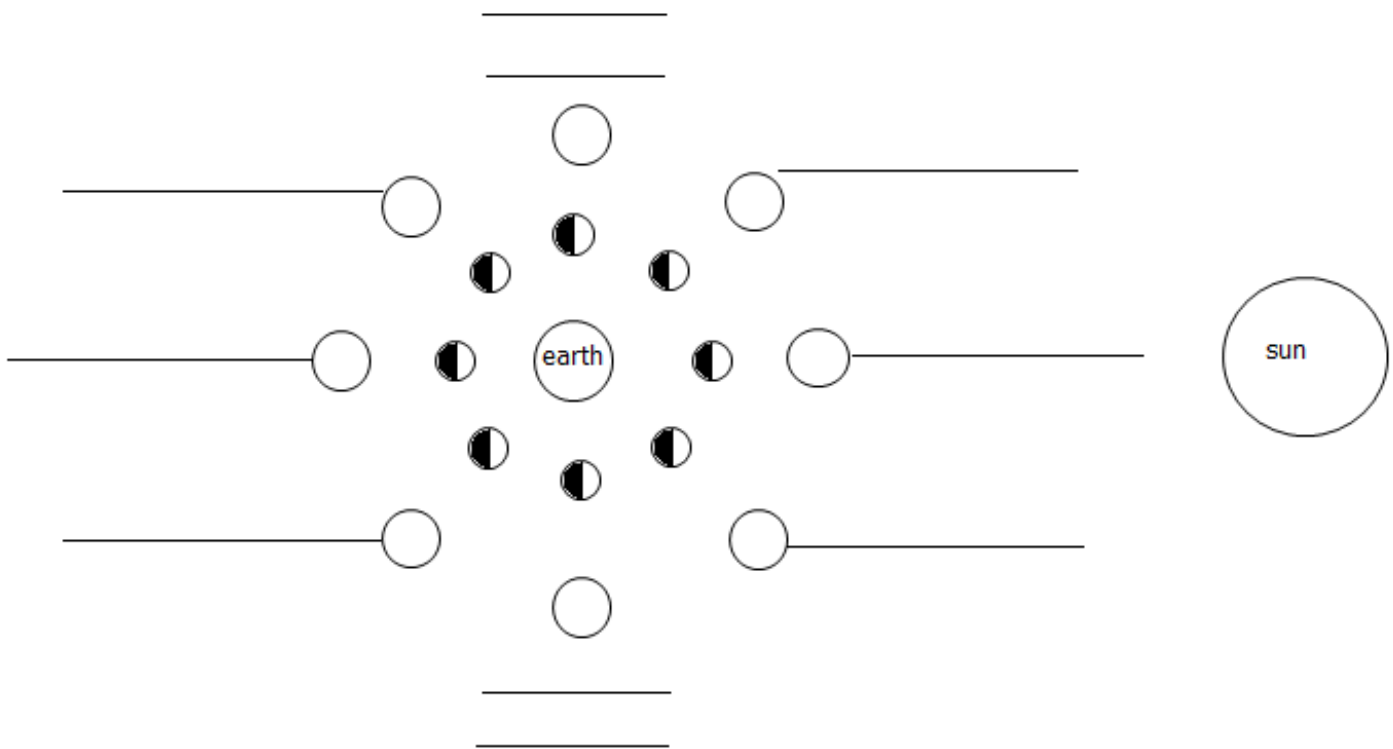


MOON NOTES 101 pts name _____

MOON --- is named _____

A. PHASES

- a. PHASES -- caused by moon's orbit around earth causing us to see different amounts of the _____ side of the moon. This view is looking down at the north pole of earth. Large circles are what we _____ from earth. Small circles are where the moon is positioned.



- b. _____ side of the moon faces earth at all times because moon is _____ on one side than the other
- c. Moon is always _____ lit up, but we only see portions of the lit side depending on our _____ from earth

B. ECLIPSES

- a. Eclipse—when one object _____ another object so it's out of view
- _____ —part of object is blocked from view
 - _____ —all of object is blocked from view
- b. types of eclipses
- _____ —when earth's shadow blocks out the view of the _____
 - lasts 2 _____
 - everyone on the _____ side of earth (night time) sees it

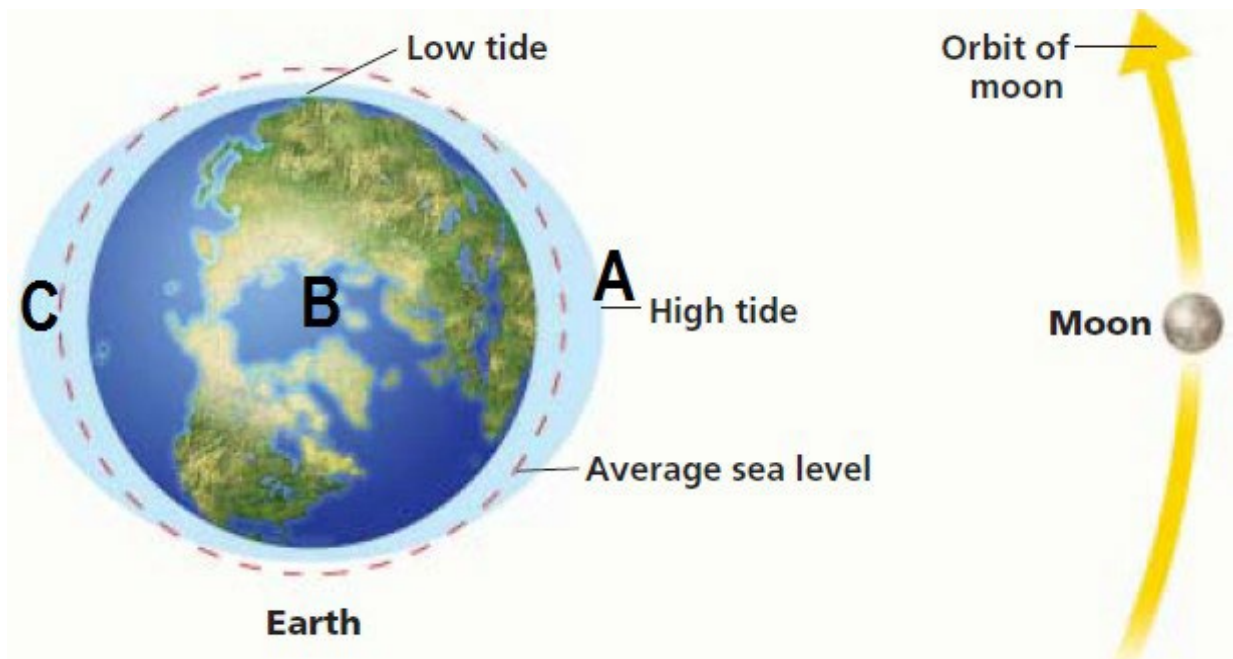
3. safe to view with no special _____
 4. happen about _____ times per year
- ii. _____ —when the moon blocks out the view of the _____ (moon is also casting a _____ on earth)
 1. lasts only 7.5 _____
 2. only can be seen by the people in the _____ of the moon
 3. must use special _____ to see it
 4. happen about _____ times per year

C. MOON SURFACE FEATURES

- a. _____ - large pits made from impacts of asteroids
 - i. Some are 2 _____ years old
 - ii. there is no erosion nor plate tectonics to _____ them away
- b. _____ {mar' ee uh} hardened _____ fields
 - i. Appear as large, _____ pools
 - ii. Once thought to be _____ of water
 - iii. Large impacts released _____ flows from below
- c. _____ - collapsed _____ tubes
 - i. look like river _____
 - ii. curvy
- d. _____ - ridges of moon dust
 - i. formed during asteroid _____
 - ii. Go _____ out from craters
 - iii. Found near _____ craters
 - iv. Go away over time as other impacts _____ them down
- e. _____ - moon _____, moon "soil"
 - i. Created from _____ asteroids
 - ii. _____ than sand
 - iii. Neil Armstrong's _____ are still marking it due to no erosion on the moon

D. TIDES

- a. TIDE DEFINITION- the periodic _____ and _____ of the water level in oceans
 - i. _____ tide- when water level is lowest
 - ii. _____ tide- when water level is highest
- b. Causes of tides
 - i. Moon's _____ pull- it is more than 2x as powerful as the sun's gravitational pull because the moon is much closer to the earth
 - ii. _____ gravitational pull- less powerful – even though the sun is bigger, it is so far away it has less influence than the moon



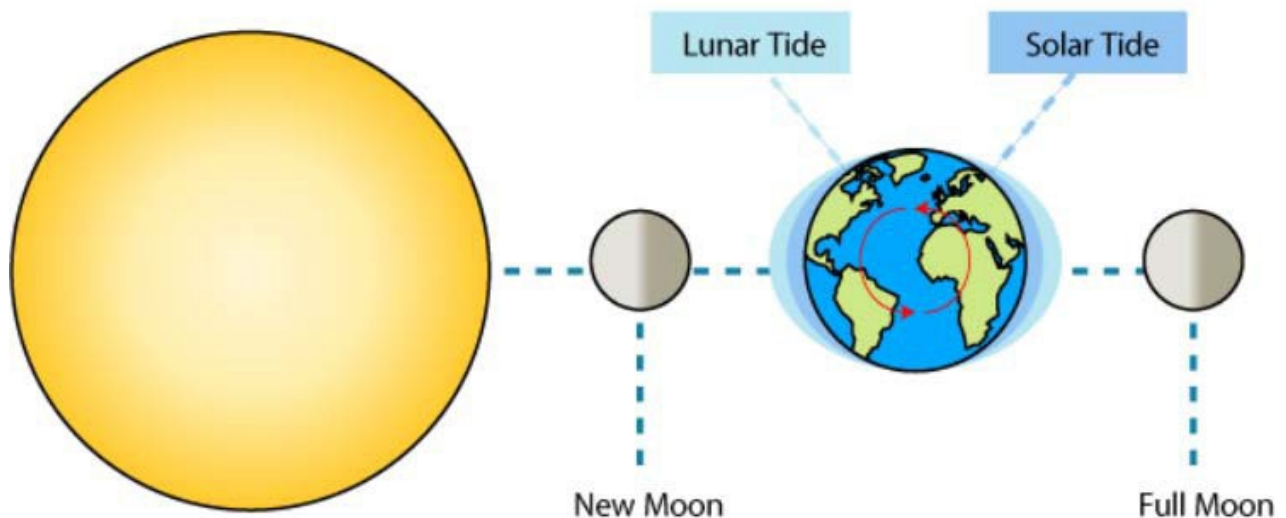
c. Why is there a bulge on the side NOT facing the moon?

- i. At point a, there is an obvious tidal _____ because of the moon's gravity.
- ii. At point b, the moon is pulling on Earth as well, but not as _____ as at point A, because it's farther away
- iii. At point c, the moon has the _____ influence. This water is not tugged on as much, so it gets "left _____"

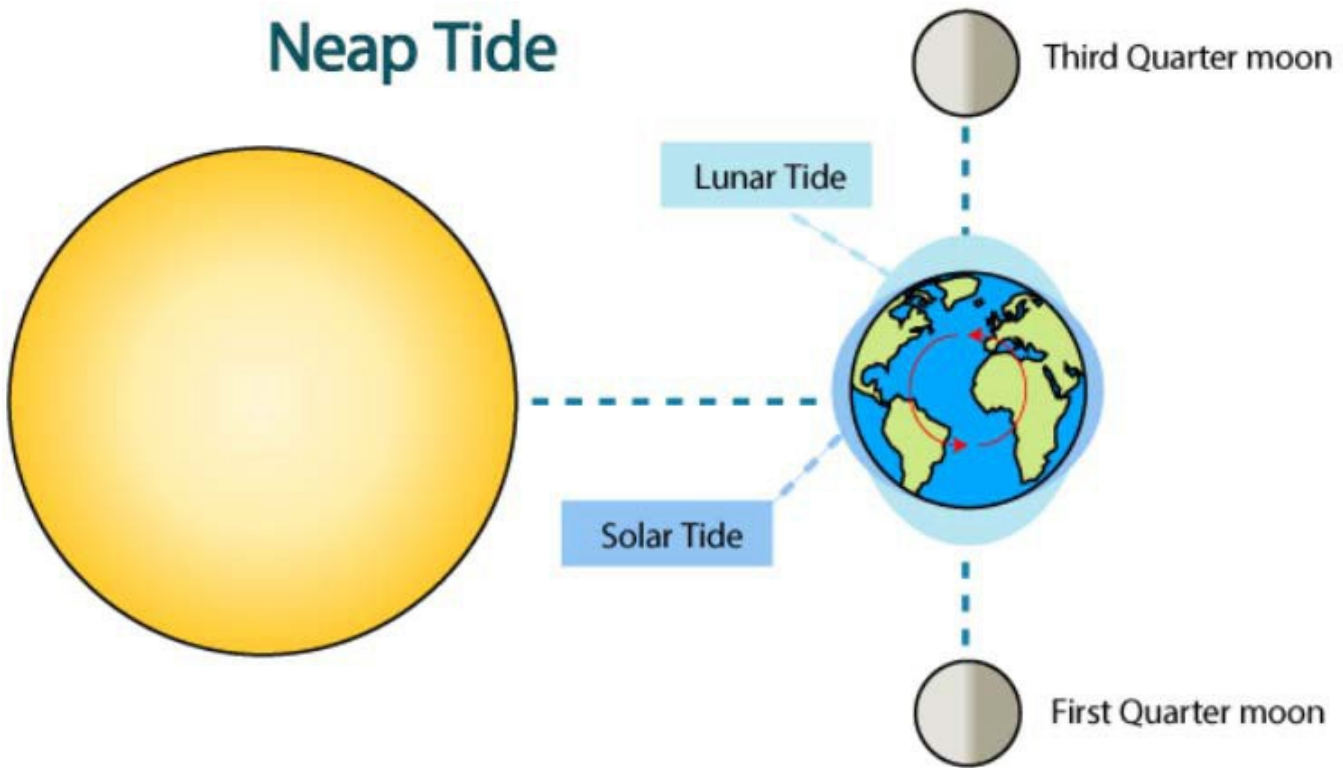
d. Types of tides

- i. _____ tide – the sun, moon, and earth are all lined up and thus the sun's gravity _____ to the pull of the moon
 1. The _____ tide is higher
 2. The low tide is _____
 3. Happens during _____ moon and full moon
 4. Lunar _____ and solar _____ are added together

Spring Tide



- ii. _____ TIDE – the sun and moon are 90 degrees apart relative to the earth, causing less _____ tidal changes
1. High tide is _____
 2. Low tides are _____
 3. Happens during 1st _____ and _____ quarter
 4. Lunar tide and solar tide are in _____ places



- e. Tidal patterns – tides are not the _____ everywhere because bodies of water are different _____, _____, and _____.
- i. _____ – 1 high tide and 1 low tide each day
 - ii. _____ – 2 high tides and 2 low tides each day (both about the same height each time)
 - iii. _____ - 2 high tides and 2 low tides each day (different heights each time)
 - iv. Happen about _____ minutes later each day

E. MOON FORMATION

- a. large _____ (size of Mars) hit earth when it was still _____
- b. melted chunks of earth _____ off
- c. chunks _____ (come together) to form a moon
- d. moon is pulled by Earth's gravity into _____

F. **MOON SIZE** -- Luna is _____ the size of earth (in diameter) (only Charron, Pluto's moon has a larger moon/earth ratio)