A-Day: Due Thurs., Dec 20 (Assigned: 12/18)
B-Day: Due Thurs., Jan 3 (Assigned: 12/19)

2007 Final Review 1

You will need your book for this homework. Read it!

1) What is a solar eclipse?

2) Draw the sun, moon, and earth to show how a solar eclipse works.

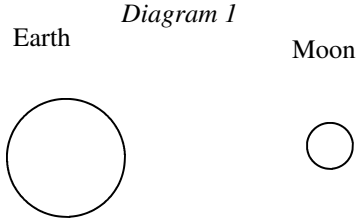
3) What is a lunar eclipse?

4) Draw the sun, moon, and earth to show how a lunar eclipse works.

5) What causes ocean tides?

6) On Diagram 1 (*at the right*), show where the high tides will be on the earth.

Diagram 1



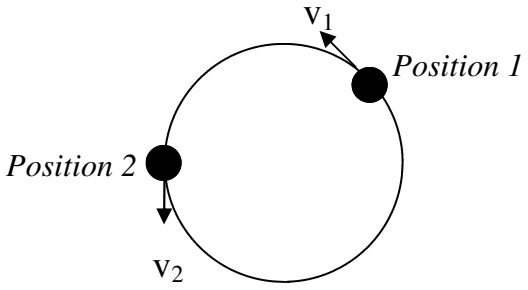
7) What is a spring tide?

8) Give two factors that affect how much terminal velocity an object has.

9) True or False and why: when the northern hemisphere experiences winter the earth is farther away from the sun.

10) What is the escape velocity for the earth?

11) The diagram at the right shows an object moving around a circular path.



A) When an object is moving in a circle, what kind of force is it experiencing?

B) Draw and label an arrow to represent the force on the object at both positions. Label it F.

C) If it is at constant speed, are the velocities the same?

D) What kind of energy must it have?

E) If at position 2 the force is removed, draw the path the object will take.

12) A 6 kg object is moving 3 m/s. It has 27 J and 18 kgm/s. After 12 N acts for 4.5 seconds and 33.75m, it is going 12 m/s. This takes 90 w and results in 2 m/s^2.
Assign variables for the all of the above quantities. (*List them with units and variables.)*