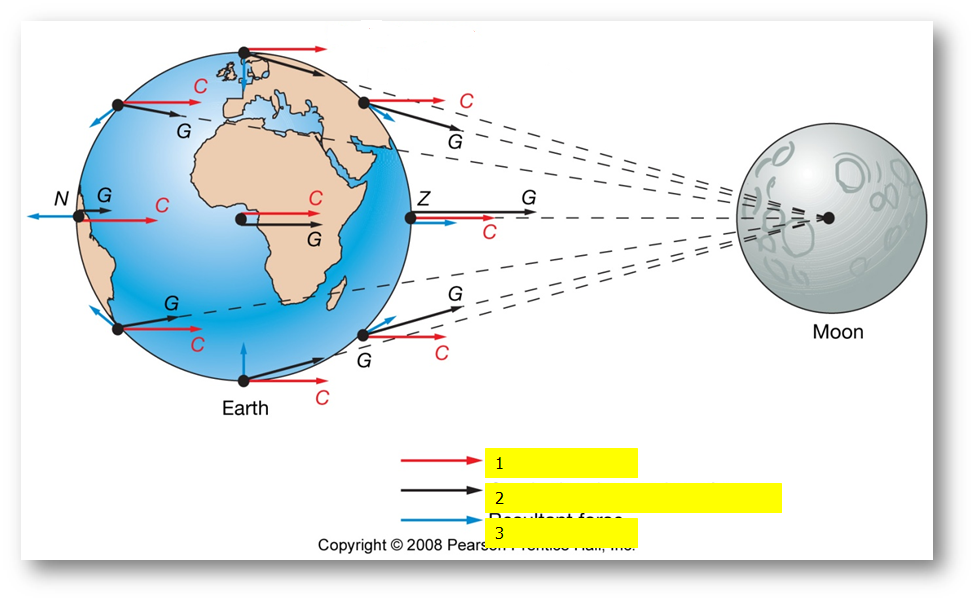
OCE 2001

Chapter 9 – Tides Name:

For these assignments, read the chapter in your book and review the powerpoint on the website.

1. What is gravitational force?
2. What is centripetal force?
3. What are resultant forces?
4. Label:



1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Why is a lunar day 24 hours and 50 minutes long, while a solar day is 24 hours?
5. Draw the position of the Moon and the Sun during a Spring Tide:

[](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwiJ3KCf7uDSAhUGYiYKHUGMBtIQjRwIBw&url=http://www.softicons.com/object-icons/earth-icons-by-bjorn-lindberg/earth-clouds-icon&psig=AFQjCNHA1n6rru-saHIFIoYFiCwFjBMT1w&ust=1489954212112320)

1. Draw the position of the Moon and the Sun during a Neap Tide:

[](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0ahUKEwiJ3KCf7uDSAhUGYiYKHUGMBtIQjRwIBw&url=http://www.softicons.com/object-icons/earth-icons-by-bjorn-lindberg/earth-clouds-icon&psig=AFQjCNHA1n6rru-saHIFIoYFiCwFjBMT1w&ust=1489954212112320)

1. Draw a picture showing perihelion and aphelion.
2. Draw a picture showing apogee and perigee.
3. Are the tides considered deep water waves or shallow water waves? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What is an amphidromic point?
5. In theory, most coastal regions on Earth should experience 2 high tides and 2 low tides per day. However, the depth and size of nearby ocean basins, distance from amphidromic points, etc can result in different tidal patterns. What are these tidal patterns?
6. Using the internet, find the tidal prediction for Fort Pierce for your birthday this year.
7. What causes whirlpools?