# 14A

3) What is the main cause of the twice-daily tides around the world? The moon’s gravity on the earth, as the earth rotates 360 each day

8) All coastlines experience a high and a low tide a little more than twelve hours apart – T or F and why? False because some bodies of water are surrounded mostly by land and are therefore less moveable

# 14B

1. What two main factors control the speed and direction of the major ocean surface currents? the prevailing winds and the Coriolis effect

3. why does the Ekman spiral happen? Which was does it twist in North America? It twists to the right. Surface currents drag deeper waters with them, but the direction of the current swirls because of the Coriolis Effect/turn of the earth.

4- How do ocean currents affect global weather patterns? They carry cold or warm water far away from their sources, which are usually the equator or the poles

6) Why are downwelling currents important to marine life and the abyssal zone of the ocean basins? They carry oxygen from the ocean’s surface into the deep ocean zones, which organisms need to live/breathe

9 – Name 3 conditions that allow gravity to produce subsurface currents. differences in temperature, salinity, and sea level

10) What kind of density current is caused by a muddy, rapidly flowing mixture of sediment and water? What events on land are similar to this? Turbidity current; it is similar to a landslide or mudslide

# 14C

5- What causes most surface waves? What other kinds of things could cause a large surface wave? Prevailing winds; sometimes earthquakes or glacier melts, landslides, can cause large surface waves

6) What two kinds of currents can occur as ocean wave come ashore? Longshore and rip currents

# Chapter Review Question

2) If the moon’s gravity causes the tidal bulge on the side of the earth facing the moon, what causes the tidal bulge on the opposite side of the earth? Since the far side of the earth moves faster than the near side, the water is flung outward, forming a bulge

Vocab 14: bring in flashcards or type up

Spring tides

Neap tides

lunar tides

solar tides

surface currents

Coriolis Effect

subsurface currents

Ekman spiral

Upwelling

Downwelling

Density currents

Thermohaline currents

Turbidity current

Wave crest & trough

Wave speed, period, base

Wavelength

Fetch

Breaker

Longshore current

Rip current

Spit

Tombolo

Barrier island