

## LESSON 15 Key Questions

- How many low tides in a 24-hour period in Maine? How many high tides?
- What is meant by ebb tide? flood tide? slack tide?
- What information can be found on a tidal chart? Where does this information come from? What is LDT and LST, why do we need to know the difference?
- How is a tidal current chart different from a tidal chart?
- Why is knowledge of tidal current important?
- How are spring tides different from neap tides?
- What is a tidal bore? Where might a tidal bore occur?
- What are semidiurnal tides? Diurnal tides? Mixed tides?
- Explain what happens to the level of the tides during the phases of a moon cycle from new moon to full moon to new moon. How does the moon's elliptical orbit affect the tides? How does the moon's perigee or nearest point of orbit affect the tides? How does the moon's apogee or farthest point of orbit affect the tides?

Refer to figure 8r-2 and 8r-3 and the text explanation of the alignment of sun, moon, and earth to produce spring tides

(Pidwirny, M. (2006)"Ocean Tides". *Fundamentals of Physical Geography, 2<sup>nd</sup> Edition*.01-10-2012.<http://www.physicalgeography.net/fundamentals/8r.html>

Refer to a source that would show pictures to help illustrate moon phases. [www.noaa.gov](http://www.noaa.gov) and [www.wikipedia.org/wiki/Moon\\_phases](http://www.wikipedia.org/wiki/Moon_phases) provide some good pictures and illustrations to use with your students. Be sure to check copyright disclaimers before printing material from websites.

- What are weather buoys? What can be learned from them?
  
- What are seamarks? What can be learned from them?
  
- What are bell buoys? What can be learned from them?