



## FUN FACT

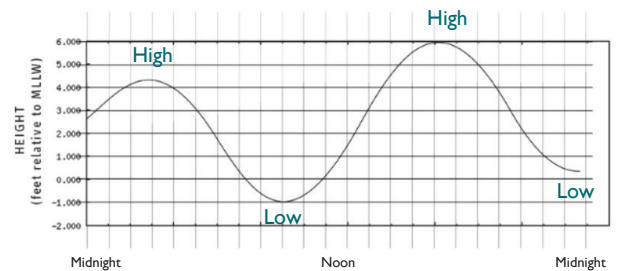
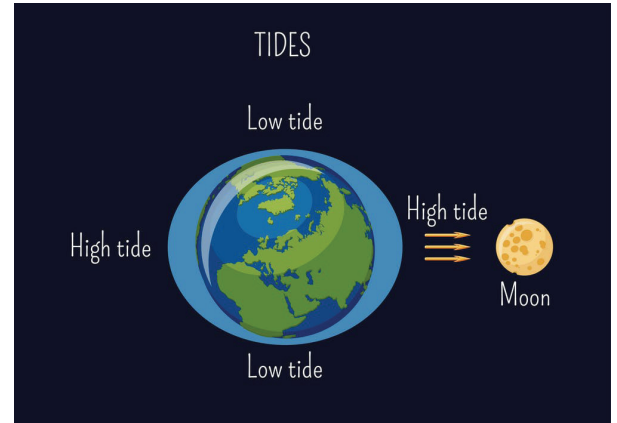
We have 4 tides every day: 2 low tides and 2 high tides.

# Tides

When you go to the beach, you might notice that the water is not always the same. At some parts of the day there will be more water in one location and at other parts of the day there will be less. You may have heard people say, "The tide is out." or, "There's a high tide today." But what is a tide?

What makes a tide?

Tides are the movement of the ocean. The moon and the sun make the tides. The earth's oceans cover about three quarters of our planet. Both the moon and the sun pull on the earth's surface like great big magnets. This is called gravitational pull. Since the moon is closer to us than the sun, its pull affects us more. When the sun and moon are lined up and pulling together, we have the biggest tides.



In San Francisco Bay the movement of the tides varies from day to day but can be as much as nearly 8 vertical feet in 24 hours. The tides in here are actively monitored by NOAA at Crissy Field, seen below, and have been since the late 1800's.



NOAA (National Oceanic and Atmospheric Administration,) is a U.S. government scientific agency that studies the oceans.

