



## Vocabulary: Hurricane Motion



### Vocabulary

- Air pressure – the force of air on a surface.
  - Air pressure is equal to the weight of a vertical column of air divided by the area of the base of the column.
  - Air pressure is measured in millibars (mb).
    - At sea level, air pressure averages 1,013 millibars.
- Coriolis effect – the curving of moving objects, including wind, from a straight path due to Earth's rotation.
  - In the Northern Hemisphere, the Coriolis effect causes moving objects to curve to the right. In the Southern Hemisphere, the Coriolis effect causes moving objects to curve to the left.
  - In addition to causing winds to blow in a curved path, the Coriolis effect causes ocean currents to flow in a curved path.
- Eye – the core of warm, relatively calm air with low pressure and light winds at the center of a *hurricane*.
  - The most violent storms in a hurricane generally surround the eye in an area known as the *eye wall*.
- Hurricane – a large, rotating tropical storm with wind speeds of at least 74 mph.
  - In the western Pacific Ocean, hurricanes are called *typhoons*, and in the Indian Ocean and around Australia, hurricanes are called *tropical cyclones*.
  - Hurricanes are categorized based on their wind speeds:
    - Category 1: 74-95 mph (119-153 km/hr)
    - Category 2: 96-110 mph (154-177 km/hr)
    - Category 3: 111-130 mph (178-209 km/hr)
    - Category 4: 131-155 mph (210-249 km/hr)
    - Category 5: greater than 155 mph (249 km/hr)
- Knot – a unit of speed equal to 1.151 miles per hour.
- Meteorologist – a scientist that studies weather and Earth's atmosphere.
- Precipitation – water that falls to Earth's surface.
  - Types of precipitation include rain, sleet, snow, hail, and mist.

