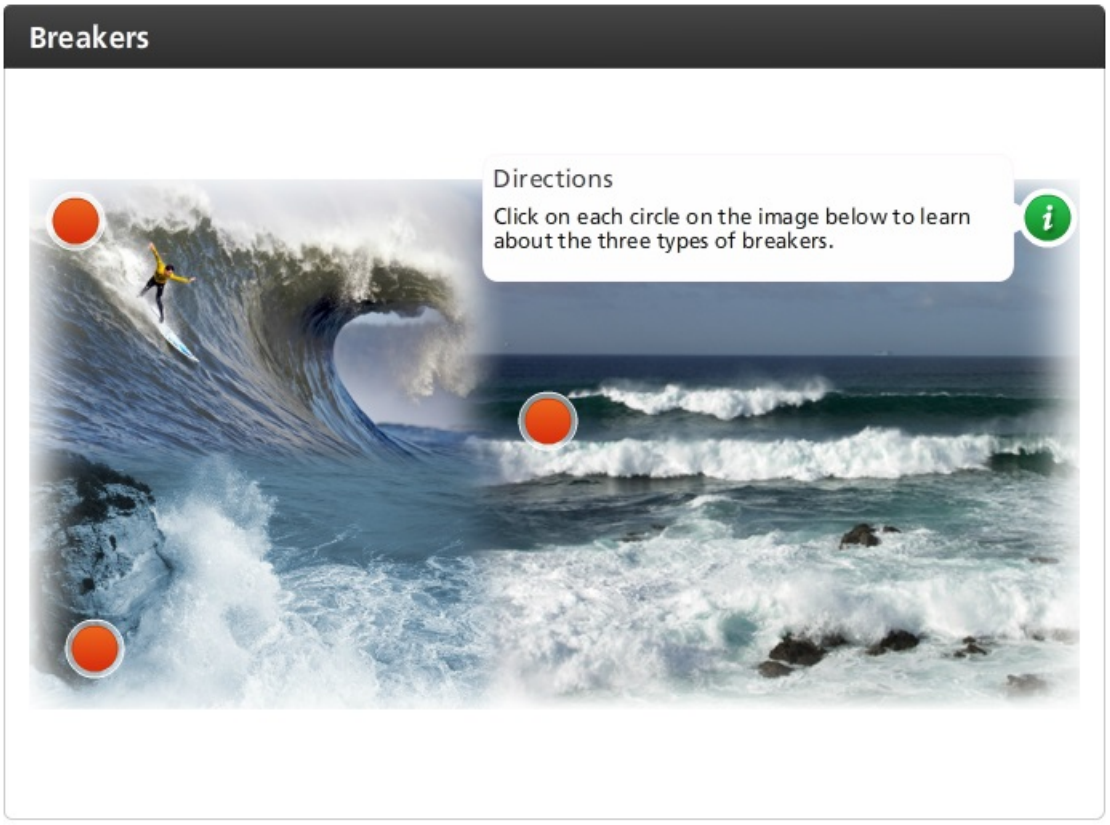
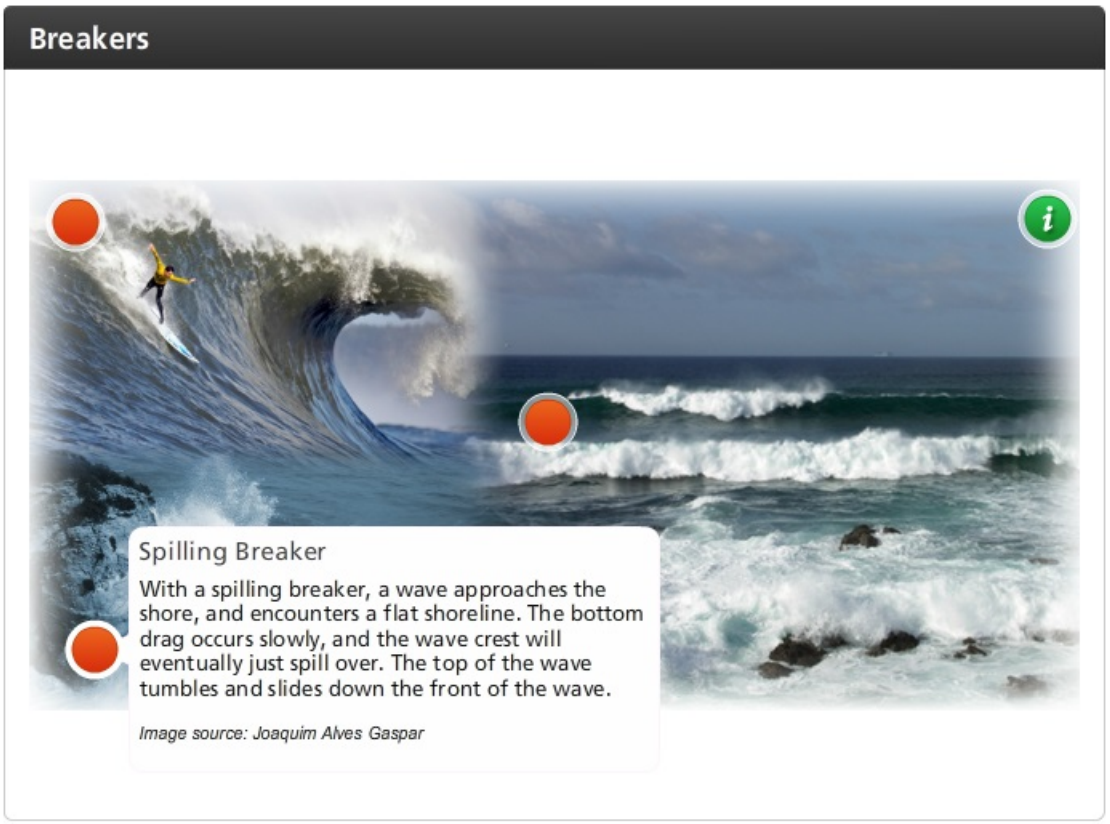
# Module 7: Ocean Motion
## Topic 4 Content: Breakers Notes




Click on each circle on the image below to learn about the three types of breakers.

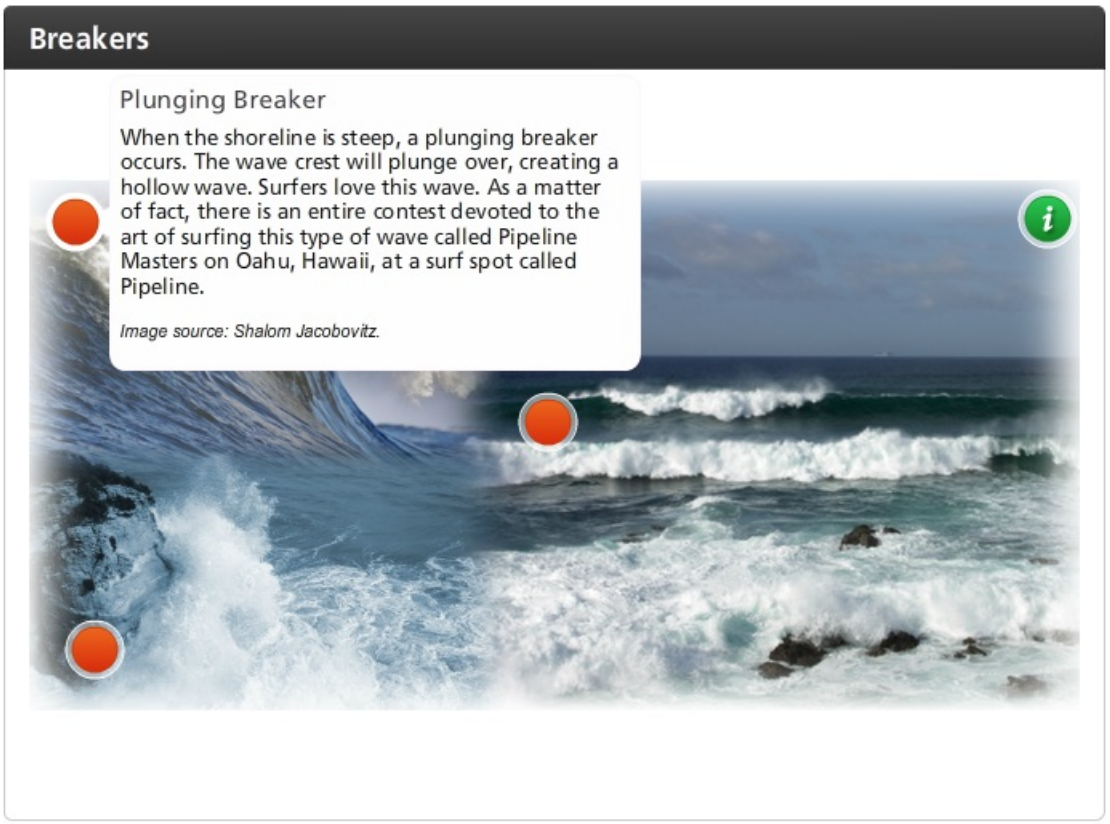
# Module 7: Ocean Motion
## Topic 4 Content: Breakers Notes




With a spilling breaker, a wave approaches the shore, and encounters a flat shoreline. The bottom drag occurs slowly, and the wave crest will eventually just spill over. The top of the wave tumbles and slides down the front of the wave.

*Image source: Joaquim Alves Gaspar*

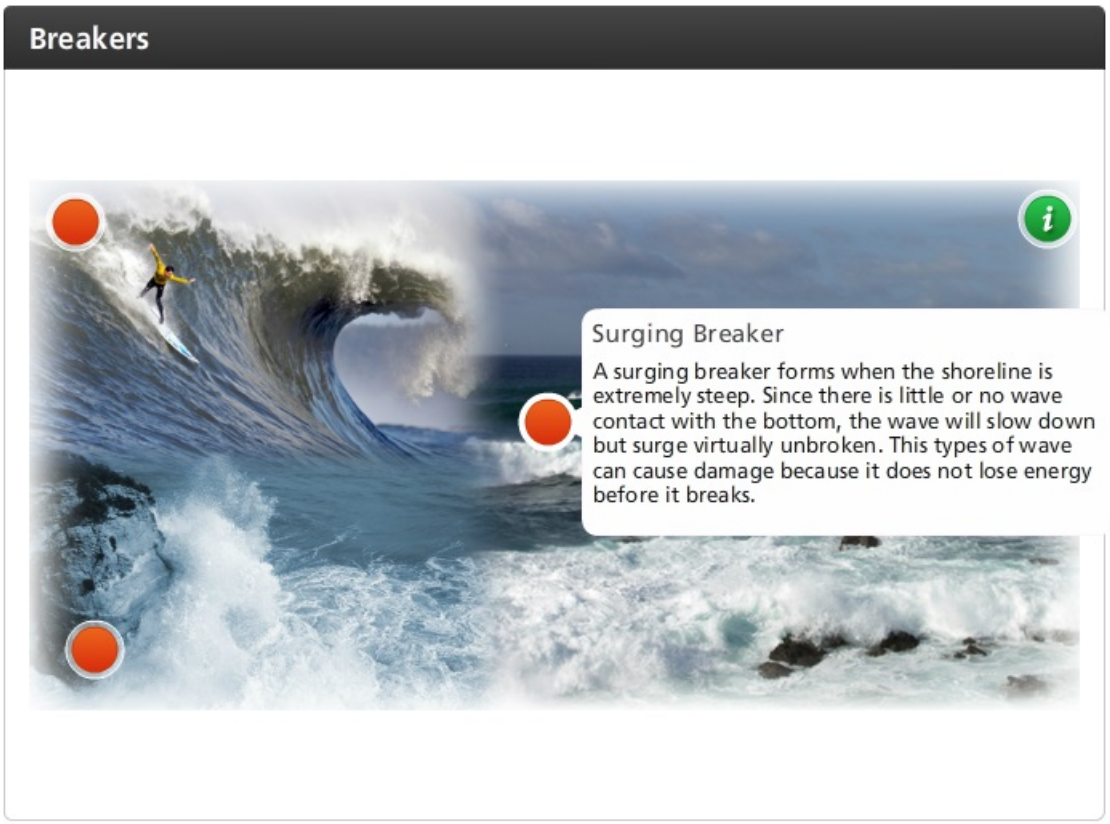
# Module 7: Ocean Motion
## Topic 4 Content: Breakers Notes




When the shoreline is steep, a plunging breaker occurs. The wave crest will plunge over, creating a hollow wave. Surfers love this wave. As a matter of fact, there is an entire contest devoted to the art of surfing this type of wave called Pipeline Masters on Oahu, Hawaii, at a surf spot called Pipeline.

*Image source: Shalom Jacobovitz.*

# Module 7: Ocean Motion
## Topic 4 Content: Breakers Notes




A surging breaker forms when the shoreline is extremely steep. Since there is little or no wave contact with the bottom, the wave will slow down but surge virtually unbroken. This types of wave can cause damage because it does not lose energy before it breaks.