Class 7
Geography

Chapter 5- WATER
Module 3/3

What are Tides ?

❖The rhythmic rise and fall of ocean water twice in a day is called as a **tide**.

❖When water covers much of the shore by raising to its highest level then it is called **high tide.**

❖When water falls to its lowest level and recedes from the shore it is **low tide**.

How are Tides formed ?

The strong **gravitational force** pull exerted by the sun and the moon on earth's surface causes the tides.

The water of the earth closer to the moon gets pulled under the influence of the moon's **gravitational force** and causes high tide.

Tides

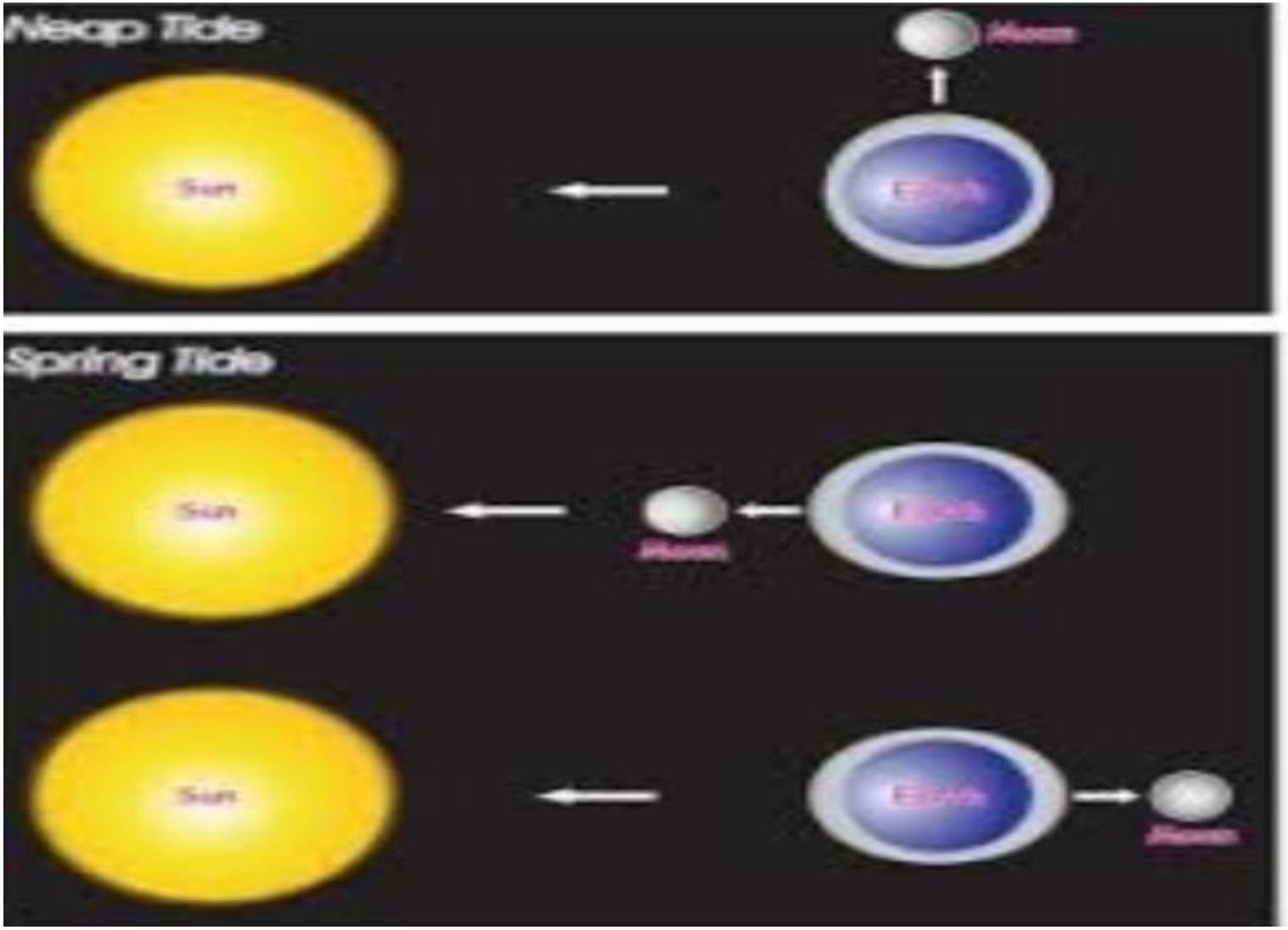
Spring Tides

During the full moon and new moon days, the sun, the moon and the earth are in same line and the tides are highest. These tides are called **spring tides**.

Neap Tides

When the moon is in its first and last quarter, the ocean water get drawn in diagonally opposite directions by gravitational pull of sun and earth resulting low tides. These tides are called **neap tides.**

SpringTides and Neap Tides



Importance of Tides

1.High tides help in navigation. They raise the water level close to the shores. This helps the ships to arrive at harbour more easily.

2.The high tides also help in fishing. Many more fish come closer to the shore during the high tide. This enables fishermen to get plentiful catch.

3.Tides are also used for the generation of tidal electricity.

Ocean Currents

- Ocean Currents are streams of water flowing constantly on the ocean surface in definite directions. The ocean currents may be warm or cold.

- Generally the warm ocean currents originate near the equator and move towards poles. The cold currents carry water from polar or higher latitudes to tropical or lower latitudes.

- The Labrador Ocean current is cold current while the Gulf Stream is a warm current. The ocean current influence the temperature conditions of the area.

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Ocean currents

- Warm currents bring about warm temperature over land surface. The areas where the warm and cold currents meet provide the best fishing grounds of the world.

- Seas around Japan and the eastern coast of North America are such examples.

- The areas where a warm and cold current meet also experience foggy weather making it difficult for navigation.