**Waves**

**What do we already know about waves?**

**Vocabulary:**

**crest**

**trough**

**amplitude**

**wavelength**

**equilibrium position**

**frequency**

**Types of Waves**

**Transverse Waves:**

Diagram:

**Longitudinal Waves:**

Diagram

**Surface Waves:**

While waves that travel within the depths of the ocean are longitudinal waves, the waves that travel along the surface of the oceans are referred to as surface waves. A **surface wave** is a wave in which particles of the medium undergo a circular motion. Surface waves are neither longitudinal nor transverse.

**Mechanical Waves vs. Electromagnetic Waves**

**Characteristics of longitudinal waves:**

**compression:**

**rarefaction**

**Diagram:**

**Frequency, Period, and Speed**

**Frequency**

**Period**

**Wave Speed:**