



Science Virtual Learning

6th Grade Science:

Waves

May 22, 2020



6th Grade Science

Lesson: May 22, 2020

Objectives/Learning Targets:

Students will understand the parts of a wave and how they relate to energy.



Warm Up

Read the event described below. Try to identify how many different waves are present. Hint: There are 5!

Imagine that your family has just returned home from a day at the beach. You had fun playing in the ocean waves under a hot sun. You put some cold pizza in the microwave for dinner, and you turn on the radio. Just then, the phone rings. It's your friend calling to ask about homework.



Warm Up - Answer Key

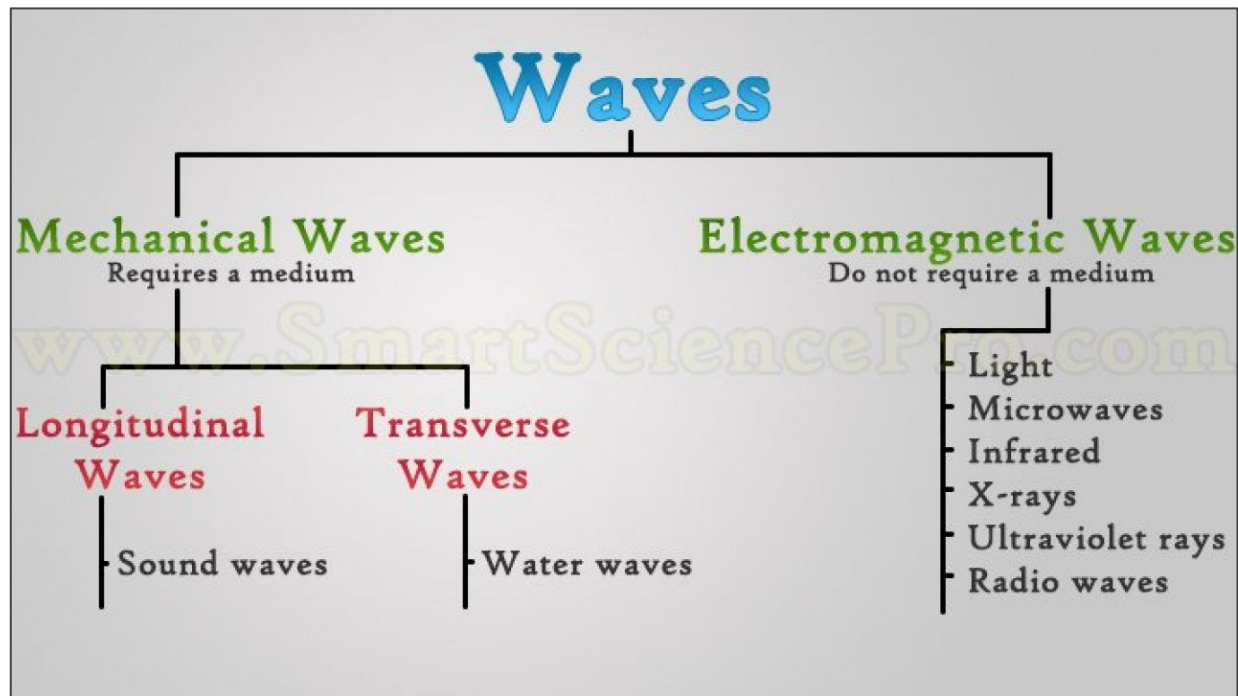
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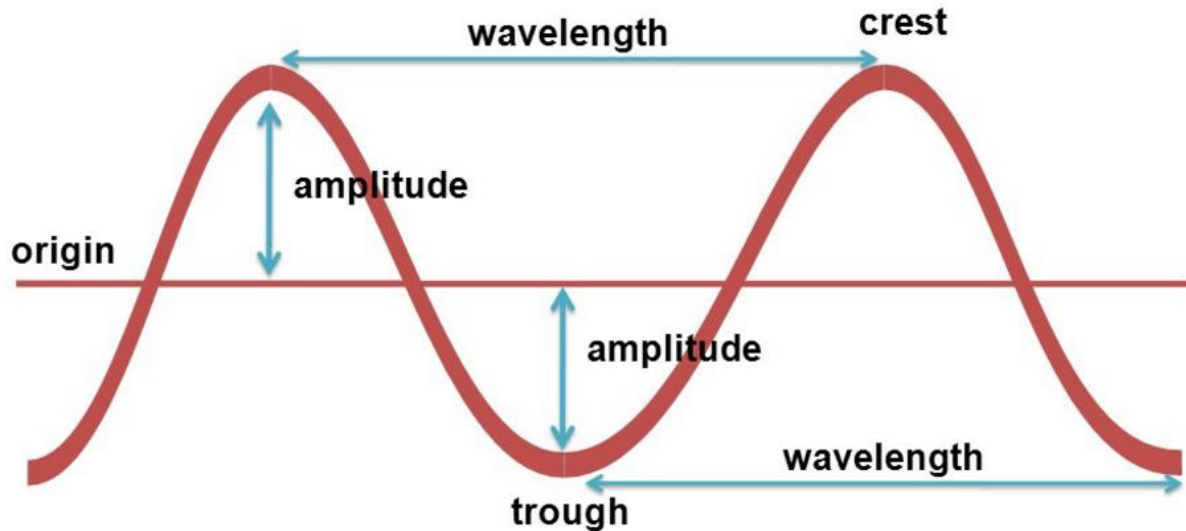
Background Information

There are many types of waves. All waves fall into one of two categories. A wave is either *mechanical*, like an ocean wave, or *electromagnetic*, like the radiation that heats your food in the microwave.

Review the chart to learn more!



Background Information



Parts of a Wave

Amplitude: The distance from the origin to the crest or trough

Crest (Peak): Highest point of a wave

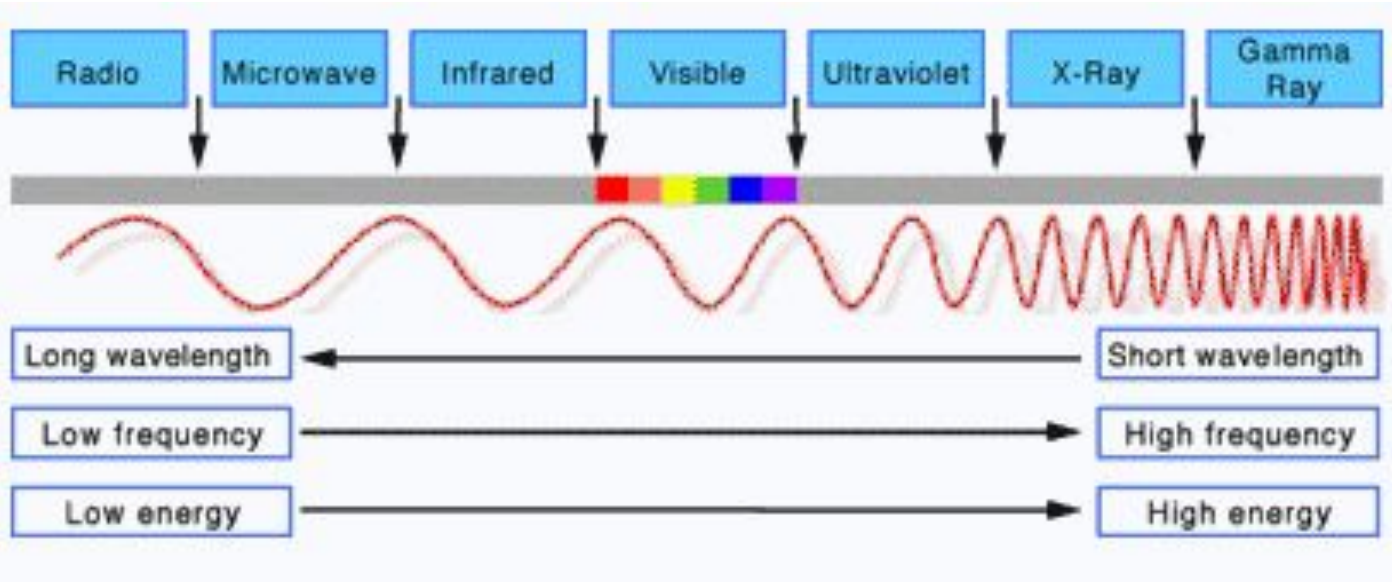
Trough: Lowest point of a wave

Wavelength: The distance between 2 crests or 2 troughs

Frequency: The amount of wave peaks passing a certain point in a given time

Background Information

The Electromagnetic Spectrum



Waves & Energy

The *shorter* the wavelength, the *greater* the energy.

The *higher* the frequency, the *greater* the energy.

The *higher* the amplitude, the *greater* the energy.

Practice

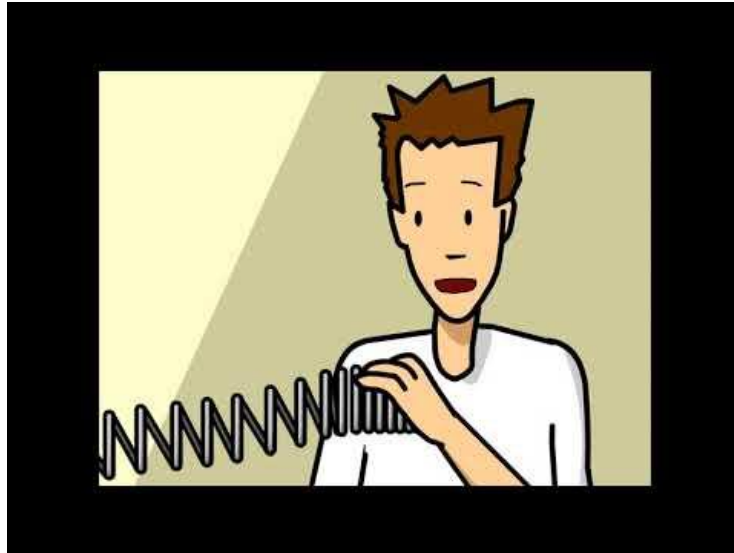
Read this [article](#) all about waves. You can have it read aloud to you if you click the “Read Out Loud” button.



Towards the bottom of the page, practice vocabulary and answer the 8 discussion questions. Click on the vocabulary/question to view the answer.

Practice

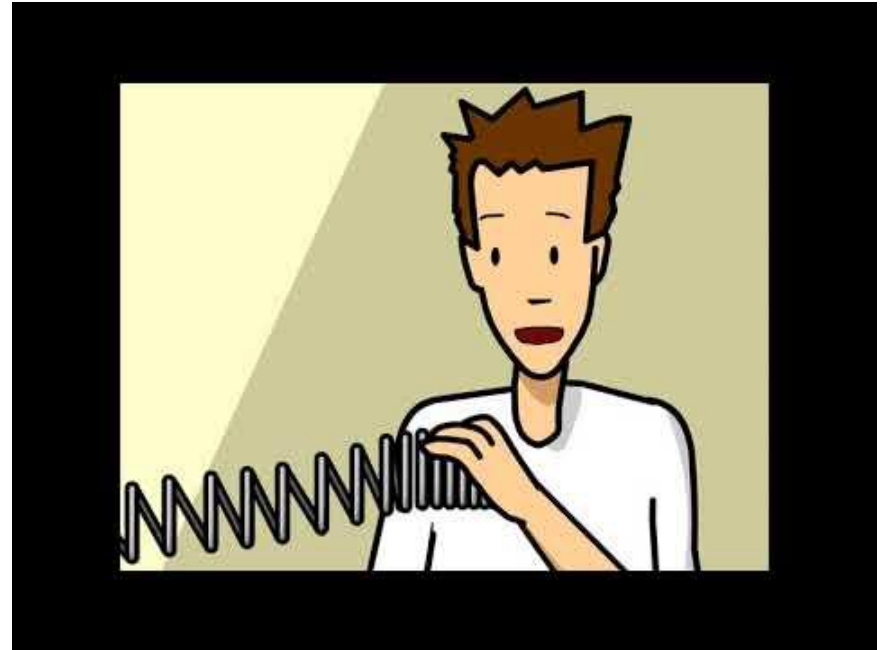
Watch the brainpop [video](#) then take the [quiz](#) on waves.



Practice - Answer Key

Watch the brainpop [video](#), then take the [quiz](#) on waves.

- | | |
|------|-------|
| 1. A | 6. C |
| 2. D | 7. B |
| 3. B | 8. B |
| 4. A | 9. B |
| 5. D | 10. C |





Additional Practice

1. Practice labeling parts of a wave with this [worksheet](#). Then check your [answers](#) to see how you did.

2. IXL - [Comparing Energy of Waves](#)

Remember you do not need to log in. Simply complete the 5 free practice problems.

3. [Wave Properties Gimkit](#)