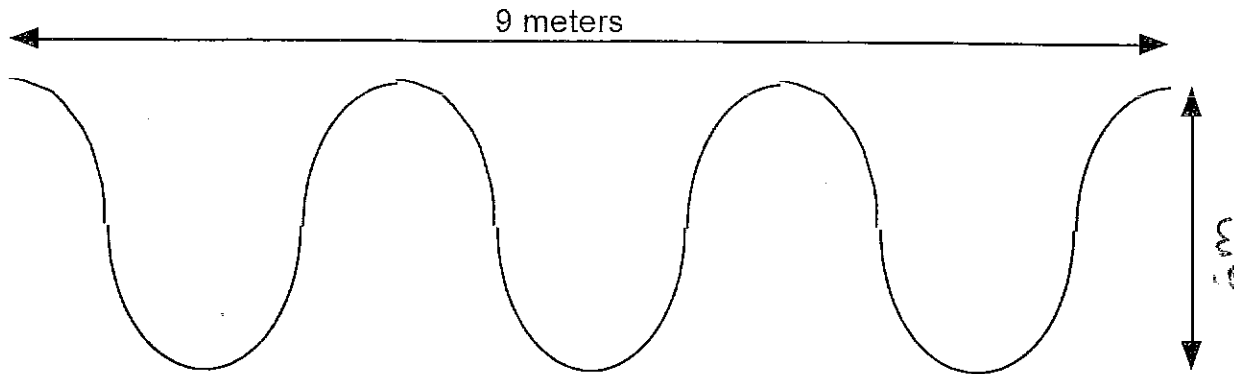


Waves/ review

$$V_{(wave)} = \lambda \times F$$

speed of sound in air at 0 C = 332 m/s + .6 m/s for 1 C change.



On the wave above label a Crest, a trough, rest point or position, amplitude & 1 wavelength. Then determine and record the wavelength and amplitude for this wave.

Wavelength =

amplitude =

What type of wave is the above longitudinal or transverse?

Would it more likely be a sound wave or light?

In what direction would it displace matter- left to right (parallel) , or up & down (perpendicular)?

If the above waves frequency is 200 Hz what would its velocity be?

formula

work

answer

How many waves per second would pass a given point?

What is this waves period?

Beneath the above wave draw a longitudinal wave that would be analogous -labeling the location of both a rarefaction and a compression.

Would this wave be representative of a sound or light wave?

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What is the speed of sound in air that is 27 C?

Formula

Work

Answer

What is the velocity of a .5m wave with a frequency of 20 Hz

Formula used

Work

Answer

What is the frequency of a sound wave traveling at a velocity of 340m/s with a wavelength of .5 m?

Formula used

Work

Answer

**What do waves do / why do they exist?**

Most waves are caused by \_\_\_\_\_.

What are the 3 primary colors of light?

When the above are mixed equally what color is formed?

What are the 3 primary pigment colors?

How are these formed?

If mixed equally what color do they form?

If blue light is shined on a red object what would we see?

Why are rainbows red on top & violet on bottom?

Why is the sky blue?

Can sound travel through space.

Why or why not.

Which wave has the highest frequency?

Wavelength ?

Amplitude?

Which is transferring the most energy?

A car honking as it goes down the street is going towards John & away from Sally.  
Will they hear the sound in the same way? Explain what happens to pitch.  
What is the above phenomena called?

Is an object submerged in water in the location it appears to be? Explain

Does Sound travel faster or slower in air then it does in a piece of steel. Why?

As the frequency Of electromagnetic waves goes up , What happens to wavelength?

When 2 or more waves interact we call this \_\_\_\_\_.  
which can be either constructive or destructive. Describe the difference.

Is light a transverse or longitudinal wave? Sound?

Do waves transport energy, matter, or both?

When a wave is reflected which change? velocity, wavelenth, frequency , direction.

A person stading in the ocean determines that every 8 seconds a wave passes.  
What is the period ? frequency?

For the volume/intensity of sound to go up what must increase? Amplitude, frequency,  
wavelength, speed?

How does a gas light tube (like neon) produce light?

Why do different elements produce different colors?

Why are metal the easiest to accomplish this phenomena with?

When electromagnetic waves (light) strikes green plants what happens?