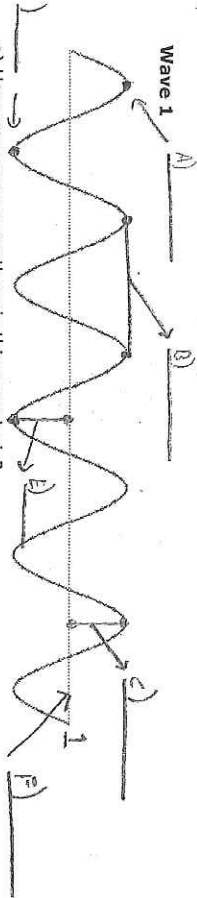


Wave Worksheet

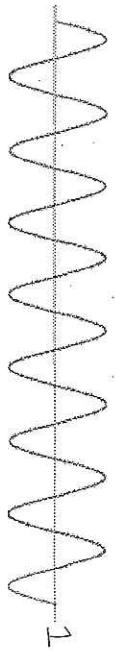
$Speed = wavelength \times frequency$

The time from the beginning to the end of the wave train in each situation is 1 second.



Wave 1
a) How many waves are there in this wave train? 3

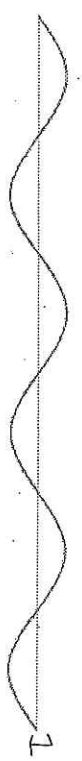
b) Wavelength cm c) Amplitude cm d) frequency Hz e) speed cm/s



Wave 2
The math formula is at the top of the paper.

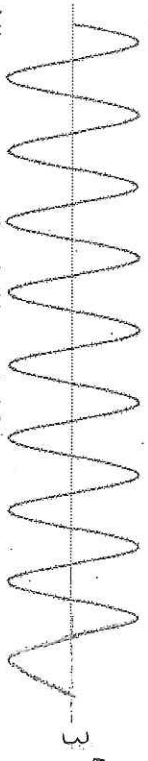
a) How many waves are there in this wave train? 1

b) Wavelength cm c) Amplitude cm d) frequency Hz e) speed cm/s



Wave 3
a) How many waves are there in this wave train? 1

b) Wavelength cm c) Amplitude cm d) frequency Hz e) speed cm/s



Wave 4
a) How many waves are there in this wave train? 3
This wave-train is 3 seconds! Divide by the # of crests to get f .

b) Wavelength cm c) Amplitude cm d) frequency Hz e) speed cm/s



Wave 5
a) How many waves are there in this wave train? 8

b) Wavelength cm c) Amplitude cm d) frequency Hz e) speed cm/s



Wave 6
a) How many waves are there in this wave train? 1

b) Wavelength cm c) Amplitude cm d) frequency Hz e) speed cm/s

1. What is a wave?

2. What is the top of a wave called?

3. What is the bottom of a wave called?

4. What is frequency?

5. If a wave is traveling at 60 cm/second and has a wavelength of 15 cm, what is the frequency?

6. What does amplitude measure?

7. What is the difference between a transverse wave and a longitudinal wave? Must mention medium

8. Are sound waves transverse waves or longitudinal waves?

9. Draw and label a longitudinal wave with alternating compressions (3) and rarefactions (2)

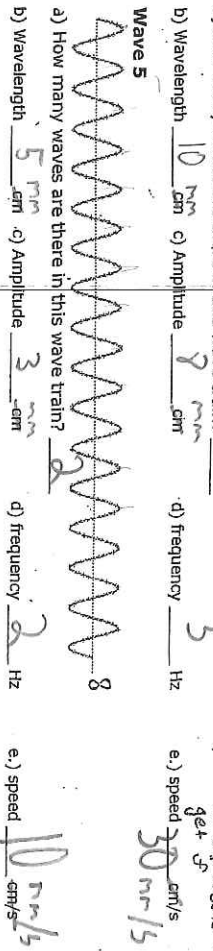
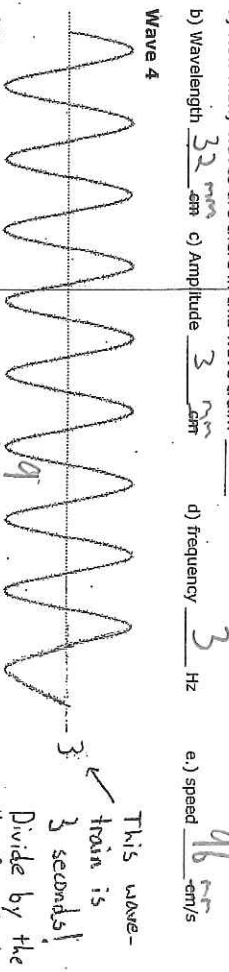
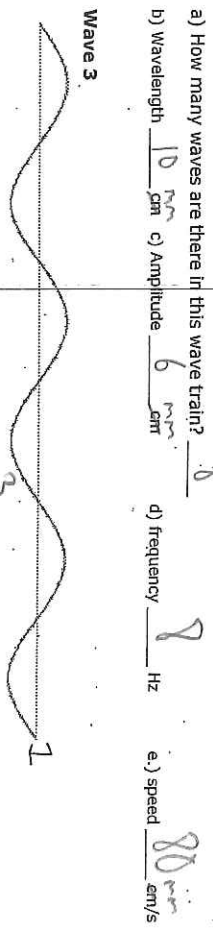
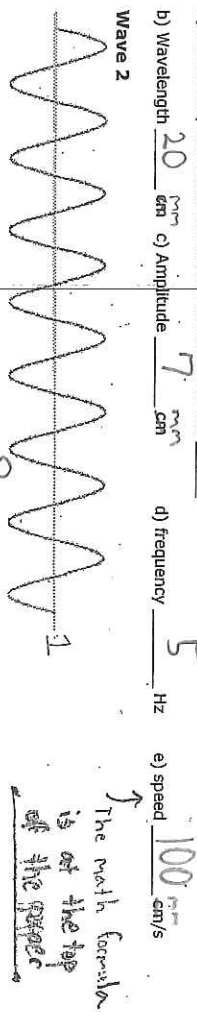
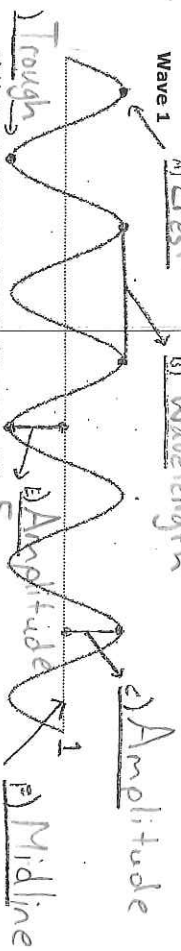
10. As Energy Increases:

a) frequency will Write increase or decrease
b) wavelength will
c) amplitude will

Wave Worksheet

Speed = wavelength x frequency

The time from the beginning to the end of the wave train in each situation is 1 second.



1. What is a wave? Any disturbance that transmits E. through matter or space

2. What is the top of a wave called? Crest

3. What is the bottom of a wave called? Trough

4. What is frequency? # of waves per second

5. If a wave is traveling at 60 cm/second and has a wavelength of 15 cm, what is the frequency?
 $S = WL \times f$ $60 = 15 \times f$ $f = 4 \text{ Hz}$

6. What does amplitude measure? Height of wave

7. What is the difference between a transverse wave and a longitudinal wave? Must mention medium

8. Are sound waves transverse waves or longitudinal waves? Longitudinal

9. Draw and label a longitudinal wave with alternating compressions (3) and rarefactions (2)

10. As Energy Increases:

a) frequency will increase

b) wavelength will decrease

c) amplitude will increase

Write increase or decrease

2