

Use with textbook pages 134–138.

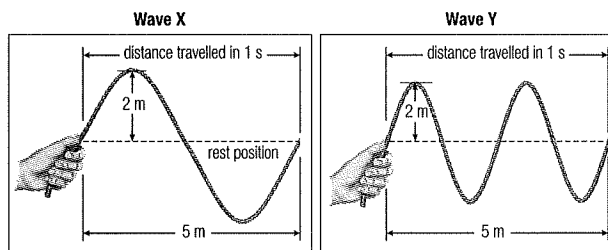
Properties of waves

Match each Term on the left with the best Descriptor on the right. Each Descriptor may be used only once.

Term	Descriptor
1. _____ crest	A. height of crest from rest position
2. _____ trough	B. a movement that carries energy through matter or space
3. _____ amplitude	C. the lowest point of a wave
4. _____ frequency	D. trough to trough
5. _____ wavelength	E. the highest point of a wave
	F. vibrations per second

Circle the letter of the best answer.

6. What happens when the amplitude of a wave becomes smaller?
- the frequency increases
 - the wavelength decreases
 - the height of the crests increases
 - the amount of energy that the wave carries decreases
7. Which of the following is **not** a way to measure wavelength?
- the distance from crest to crest
 - the distance from trough to trough
 - the distance from the top of a crest to the bottom of a trough
 - the distance covered by one complete crest plus one complete trough
8. Which of the following statements is true?
- The wavelength of a wave increases as the frequency increases.
 - The wavelength of a wave increases as the frequency decreases.
 - The wavelength of a wave decreases as the frequency decreases.
 - The wavelength of a wave decreases as the frequency stays the same.
- Use the following diagrams to answer questions 9 and 10.



9. Wave X has a higher frequency than Wave Y.
- The statement is supported by the the diagrams.
 - The statement is not supported by the diagrams.
 - You cannot tell by looking at the diagrams.
10. Which statement is correct?
- Amplitude and wavelength are the same for both waves.
 - Amplitude is the same for both waves.
 - Wavelength is the same for both waves.
 - Neither amplitude nor wavelength is the same for both waves.

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True or false?

Read the statements given below. If the statement is true, write “T” on the line in front of the sentence. If it is false, write “F,” and then rewrite the statement so it is true.

1. _____ Waves transfer matter forward.

2. _____ Energy is the capacity to apply a push or pull to an object.

3. _____ A trough is the highest point in a wave.

4. _____ The wavelength is the distance from crest to trough.

5. _____ The amplitude of a wave is the height of a wave crest or the depth of a wave trough from the rest position.

6. _____ The larger the amplitude, the less energy is transported by the wave.

7. _____ Amplitude is the number of motions that occur in a given time.

8. _____ Frequency is measured in units called hertz.

9. _____ The wavelength of a wave increases as frequency increases.
