

## Learning Intention

- Learn about the frequency and amplitude of waves.

## Questions

1. Use the 3 waveforms shown to the right to answer the following questions:

- a. How many wavelengths are in Wave 1?

$2\frac{1}{4}$

- b. How many wavelengths are in Wave 2?

$2\frac{5}{8}$

- c. How many wavelengths are in Wave 3?

1.5

- d. Which wave is the highest frequency?

Wave 2

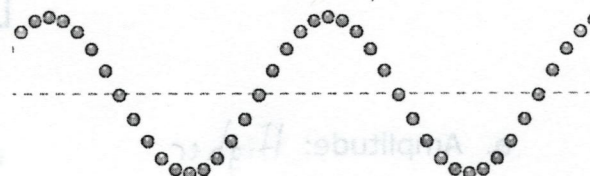
- e. Which wave is the lowest frequency?

Wave 3

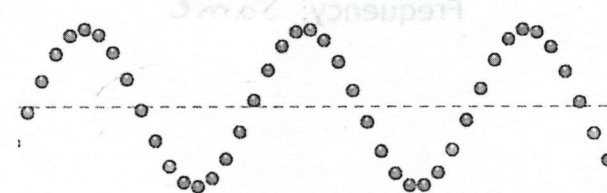
- f. How can you tell by looking at a graph if a wave is high frequency?

A high frequency wave goes up and down a lot

Wave 1:



Wave 2:

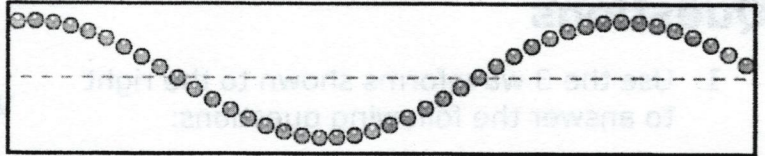


Wave 3:



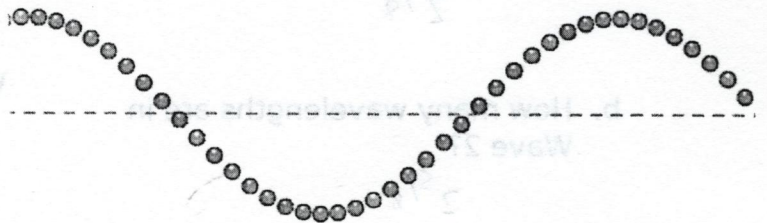
2. For each of the following questions, compare the wave's amplitude and frequency to the Reference Wave shown below. For each wave, say whether the amplitude is the same/lower/higher, and whether the frequency is the same/lower/higher.

Reference Wave



a. Amplitude: Higher

Frequency: Same



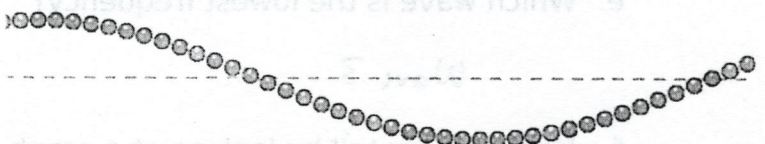
b. Amplitude: Lower

Frequency: Higher



c. Amplitude: Same

Frequency: Lower



d. Amplitude: Higher

Frequency: Higher

