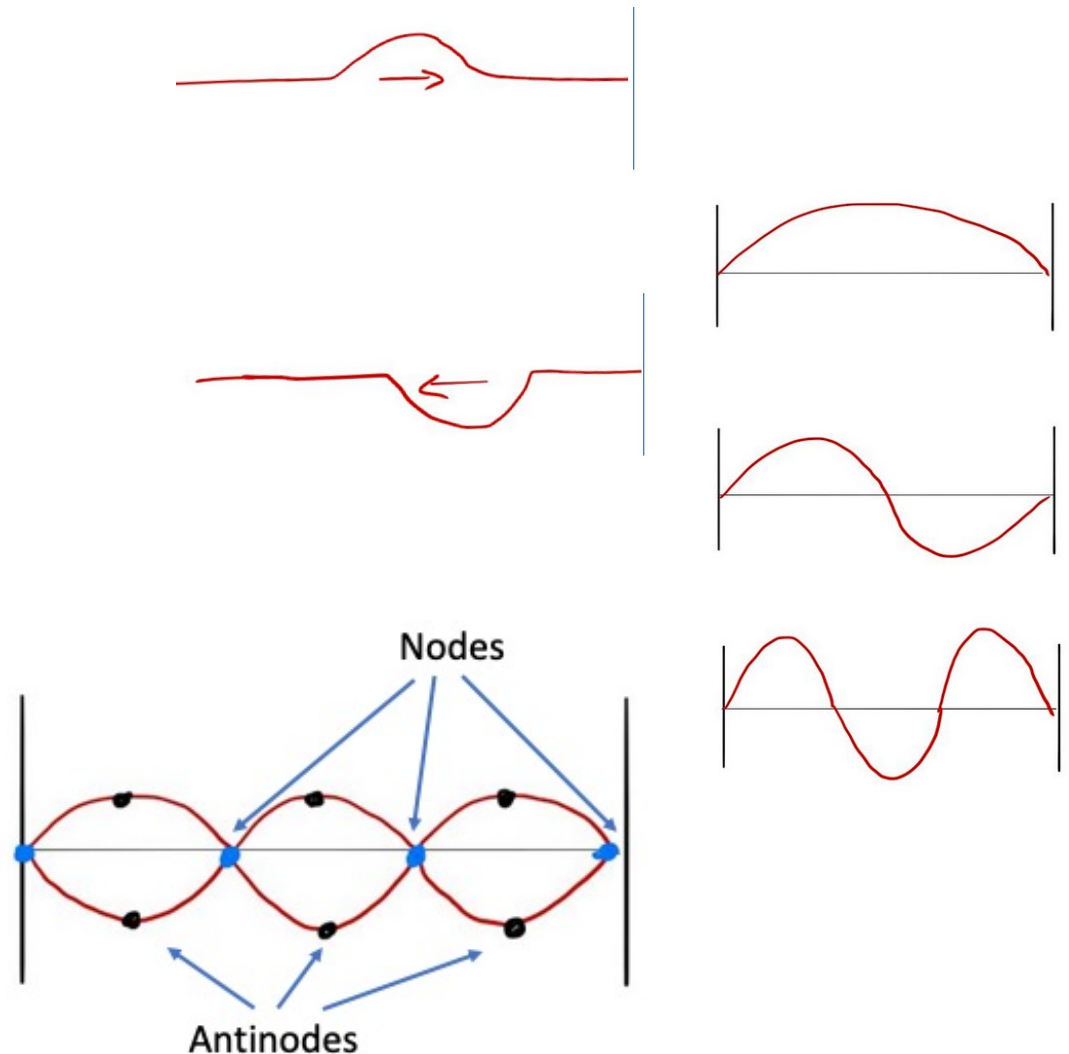


Standing Waves

- Wave Reflection
- Interference
- Standing Waves
- Nodes and Antinodes
- Scientific and Musical Names



Preview File

Please enjoy this preview of your Student Version of the presentation. Please note within this sample file:

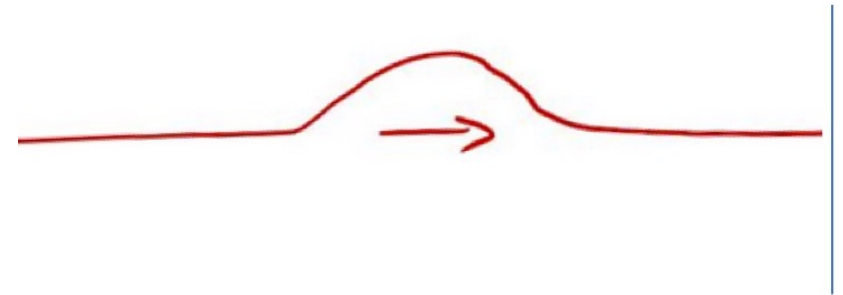
- Some slides appear blank because they have been removed
- Student versions have portions of the text removed which is given in the teacher version and appear as _____ which the students are to fill in
- Other slides may have on them, this represents writing that has been removed on this sample

The paid full version of your resource includes both Google Slides and PowerPoint and is Google Classroom Ready

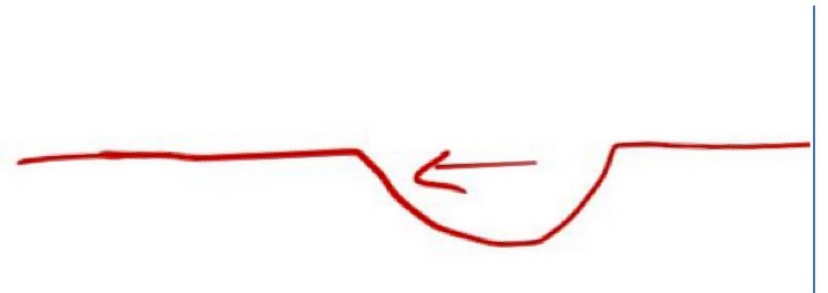


Fixed End Reflection

- _____

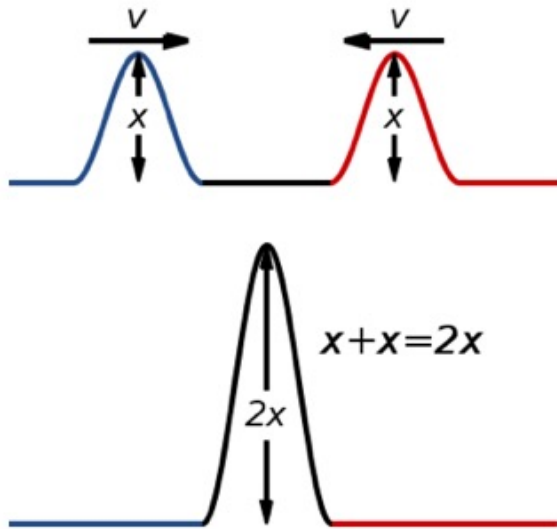


- This reflection will be an inverted version of the incoming wave

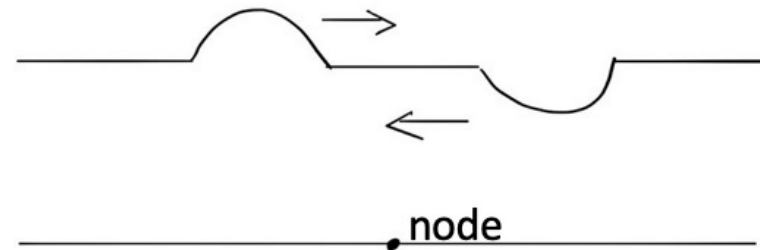


Interference

Waves can interfere with each other, either constructively or destructively.



Constructive Interference

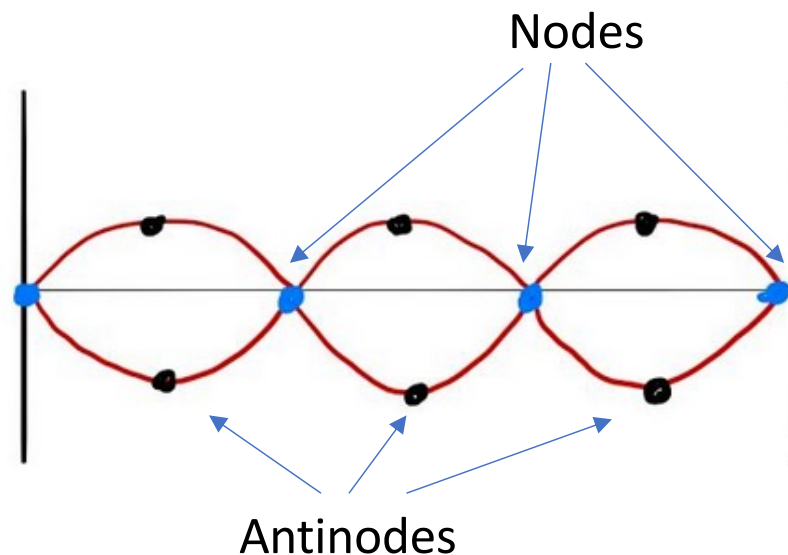


Destructive Interference

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Removed**

Nodes and Antinodes

- _____
- The nodes are spaced $\frac{1}{2}$ a wavelength from each other
 - Therefore, the distance between three nodes = 1 wavelength
- Areas which contain our supertroughs and supercrests are called the antinodes



Check Your Understanding

The distance between two successive nodes in a vibrating string is 10 cm. The frequency of the source is 30 Hz. What is the speed of the waves in cm/s?

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Standing Waves – Scientific and Musical Names

- Name given to standing wave patterns
- As the frequency increases, more nodes and antinodes are formed
- These standing wave patterns have names

Number of Loops	Number of Nodes	Number of Antinodes	Scientific Name	Musical Name
			First Harmonic	Fundamental
			Second Harmonic	First Overtone
			Third Harmonic	Second Overtone

