

Acoustic Resonance, Interference, and Standing Waves Grade 11 –Waves and Sound

Acoustic Resonance, Interference and Standing Waves Visuals Information

Slide 3:

When two waves interfere in the same medium, the resultant wave will have a displacement, which is the algebraic result of adding the displacements of the individual waves together.

Slide 4:

When the displacement of the interfering waves is in the same direction, the result is *constructive interference*.

When the displacement of the interfering waves is in the opposite direction, the result is *destructive interference*

Slide 5:

The constructive and destructive interference of two waves with the same frequency appear to stand still.

The fixed points along the resultant standing wave are nodes (points with 0 displacement) and antinodes (points of maximum displacement).