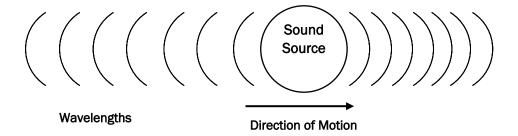




Doppler Ball

BACKGROUND:

The Doppler effect occurs when an observer hears a sound from a moving source. If the sound source is moving toward the observer, the perceived frequency will be higher than the actual sound frequency. If the source is moving away from the observer, the perceived frequency will be lower.



SETUP INSTRUCTIONS:

Snap the battery connection onto the 9V battery (included) to start the buzzer. Push the battery into the slit in the ball, followed by the buzzer.

EXPERIMENTS:

- 1. Start the buzzer and play catch. If the ball is thrown fast, students should be able to hear that the pitch is higher as the ball approaches than as it moves away.
- 2. Tie a string tightly around the ball. Swing it in a circle above your head. Students can hear the shift in pitch as it alternately approaches and moves away.

RELATED PRODUCTS:

Sound & Waves Advanced Demonstration Set (P7-2020)

