

<b>Lesson Title:</b>	<b>Wave Interference PhET Simulation</b>
<b>Standards (TEKS):</b>	7B
<b>Learning Objectives:</b>	<ul style="list-style-type: none"> <li>Review properties of waves (frequency, wavelength and amplitude)</li> <li>Introduce light and its properties</li> </ul>

AGENDA	KEY POINTS
1. PhET Simulation 2. Conclusion	Frequency, amplitude and speed are all characteristics of water and sound waves. Frequency – the number of cycles or vibrations per unit of time Amplitude – the maximum displacement from equilibrium

Time	Learning Activity
45	Part 1 – Water Waves Students will explore how the amount and timing of water dripping affects the frequency and speed of the water waves. They will review the connection between frequency and wavelength Part 2 – Sound Waves Students will calculate the speed of sound using the computer simulation and relate amplitude to loudness.  <b>Guiding Questions</b> 1. How does varying the amplitude of a wave affect the frequency or wavelength of a wave? 2. What is the difference between the incident and the reflected wave? 3. How does an interference pattern change when the frequency of the waves changes? 4. How does an interference pattern change as the sources move closer together?
10	Students will respond to a conclusion questions.