

Main Ideas, Key Points, Questions:

After watching the video segment, write down key points, main ideas, and big questions.

Objective(s):

- *Understand how sound waves behave when they are either reflected or diffracted by a physical boundary.*
- *Understand how sound waves experience constructive and destructive interference and how these apply to the creation of beats.*

Notes:

During the video segment, use words, phrases, or drawings to take notes.

Summary:

After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: "If I was going to explain this to someone else, what would I say?"

Answer the following.

1. Define diffraction in your own words.

2. What types of sound waves diffract more than others?

3. When you hear thunder from far away, does it have a high pitch or a low pitch? Explain.

4. Define reflection in your own words.

5. Describe what happens to the amplitude of sound waves that experience constructive interference.

6. Describe what happens to the amplitude of sound waves that experience destructive interference.

Answer the following.

7. Define the superposition principle in your own words.

8. When are beats formed?

9. How do you determine the beat frequency between two different waves?
