

➤ Main Ideas, Key Points, Questions:

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

➤ Objective(s):

- *Understand how sound behaves when it encounters a physical boundary, either to reflect or diffract.*
- *Understand how constructive and destructive interference occur for sound waves, 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 a far distance away, does it have a high pitch or a low pitch? Explain why you hear what you hear.

4. Define reflection in your own words.

5. Describe what happens to the amplitude of waves when constructive interference occurs.

6. What will be the result when sound waves 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?
