

Name: \_\_\_\_\_

## Discovery Techbook: What is sound?

### \_\_\_\_\_ What is sound? (2:31)

- a. Describe or draw how we hear sound.

### \_\_\_\_\_ Longitudinal Waves (1:15)

- a. What are the two parts of a longitudinal wave?

### \_\_\_\_\_ What Affects Sound? (3:08)

- a. What does it mean to reach Mach 1?
- b. What type of matter does sound travel the fastest in?
- c. Why do sound waves travel faster in denser materials?
- d. Which type of temperature does sound travel the fastest in?

\_\_\_\_\_ **Vibrations (1:57)**

a. What is sound?

b. What is a vibration?

\_\_\_\_\_ **The Speed of Sound - Interact**

	<b>Steel/50m</b>	<b>Air/50m</b>	<b>Water/50m</b>
<b>Distance:</b>	_____	_____	_____
<b>Time:</b>	_____	_____	_____
<b>Speed:</b>	_____	_____	_____

\_\_\_\_\_ **Sound Waves (2:02)**

a. What is the difference between the compression and rarefaction in a sound wave?

\_\_\_\_\_ **Submarines and Sonar (2:15)**

a. How does Sonar work in a submarine?

\_\_\_\_\_ **Dolphins' Sonar (1:28)**

a. What is infrasonic?

b. What is ultrasonic?

\_\_\_\_\_ **Echolocation: Communication Among Species (2:06)**

\_\_\_\_\_ **What is Pitch? (2:03)**

a. What is pitch?

b. What is the relationship between frequency and pitch?

\_\_\_\_\_ **Using Sound to Navigate (3:07)**

a. How does the bat make it through the forest?

\_\_\_\_\_ **Echolocation As a Strategy for Catching Prey(3:18)**