Travel of Sound: Student Worksheet

Questions

1. Through which bag did you hear the sound best?

2. Through which bag was the sound hardest to hear?

3. Why was sound difficult to hear from the bag of the previous question (question #2)?

4. People who lived on the Great Plains in the early days of the United States put an ear on the ground to tell if buffalo or horses were coming. Why didn’t they simply listen in the air?

5. Dolphins and whales communicate through great distances underwater. Do you think they could communicate from so far away if they lived on land?

Travel of Sound: Answer Key

1. Through which bag did you hear the sound best?

*The bag of dirt allowed the clearest sound to be heard because the molecules are closest together.*

2. Through which bag was the sound hardest to hear?

*Sound was the most difficult to hear in the bag of air.*

3. Why was sound difficult to hear from the bag of the previous question (question #2)?

*Sound was difficult to hear in the bag of air because the molecules are less compact and are more spread out.*

4. People who lived on the Great Plains in the early days of the United States put an ear on the ground to tell if buffalo or horses were coming. Why didn’t they simply listen in the air?

*Sound travel through the air by molecules colliding with one another. As each molecule collide with one another, they travel further and further apart thus sound become less clear. Sound travel quicker in solids (the ground) because their molecules are more compact and closer to one another.*

5. Dolphins and whales communicate through great distances underwater. Do you think they could communicate from so far away if they lived on land?

*Whales and dolphins will not be able to communicate with each other if they are so far away as their method of communication is more of a short to mid range echolocation.*