Have you ever shouted in the mountains and heard your voice come back to you? This is called an echo. It happens because sound waves travel through the air, hit a surface like a rock or a mountain, and bounce back to your ears.

The echo is louder if the surface is hard and smooth. If the surface is soft or uneven, like grass or trees, the sound is absorbed, and the echo is weaker. That is why echoes are easier to hear in places with lots of rocks or walls.

An echo can also teach us about distance. The farther the surface is, the longer it takes for the echo to return. This is why echoes in large valleys take more time to hear than in a small room.

Understanding how sound behaves helps us in daily life. For example, ships use echoes to measure the depth of the ocean. This technology is called sonar.

Why do echoes happen?

What kind of surface creates a louder echo?

What is an example of how we use echoes in real life?

LIVEWORKSHEETS