

# Speed of Sound

Sound travels at a speed of 340 metres per second in air

An aircraft that travels at the speed of sound is said to have a speed of Mach One.  
Double the speed of sound = Mach two



Concorde: A supersonic aircraft. This means it can travel faster than the speed of sound.

You can find the distance a thunderstorm is away from you by counting the number of seconds between the flash and the thunder.

Distance in metres =  $340 \times (\text{time in seconds})$

To count seconds say "One mississippi, two mississippi etc

How far does the sound of an explosion travel in 5 seconds?

How long would it take sound to travel 1000 metres?

An aircraft is travelling at Mach 2. How long would it take the aircraft to travel between Glasgow and London which is 555 km



There is 5 seconds between the flash of thunder and the rumble.  
How far away is the thunder storm?

A thunder storm is 10kilometres away.

What would be the time delay between flash and bang?

Describe what will happen to the time between the flash and rumble of a thunderstorm if it is getting closer.

