



An Australian Government Initiative



SOUNDS OF SCIENCE

EASY

This is an audio-based Brain Break activity where participants listen to a sound and identify its source. While it may not be immediately obvious, all the sounds relate to science in some way!

The sounds are sorted into 3 categories (easy, medium and hard), and each includes an optional hint, and an explanation about the science behind the sound.

This activity suits read-aloud delivery in person, over a PA system, or video call, and adds variety to the text-only Brain Break quizzes.



→ TO ACCESS SOUNDS FOR THE EASY LEVEL, VISIT:

<https://soundcloud.com/soundsofscience2026/sets/easy>

SOUND 1: HEARTBEAT

HINT: Powered by this beat, from your head to your feet

EXPLANATION: Your heart makes a 'lub-dub' sound because tiny valves inside it are opening and closing as blood moves through it. The 'lub' happens when the valves between the atria (the upper chambers of the heart) and ventricles (the lower chambers of the heart) close, and the 'dub' happens when another set at the exit points of the heart close. This helps keep blood moving in the right direction.

MORE INFORMATION: <https://www.nhlbi.nih.gov/health/heart/heart-beats>

SOUND 2: MAGPIE

HINT: Let your thoughts take flight, and picture black and white

EXPLANATION: If you live in Australia, chances are you have heard a warbling call like this from a magpie. Magpies use calls to announce or defend their territory and often perform in duets or groups. Considered one of Australia's best songbirds, magpies can mimic over 35 species of birds and other animal calls, such as dogs and horses, and can even mimic human speech!

MORE INFORMATION: <https://australian.museum/learn/animals/birds/australian-magpie/> • <https://fieldofmar-e.schools.nsw.gov.au/fact-sheets/birds/australian-magpie-fact-sheet>

SOUND 3: LIGHTING A MATCH

HINT: Chemical reaction, caused by friction

EXPLANATION: Have you ever wondered how a match catches fire? Safety match heads contain oxidising agents, usually potassium chlorate (which releases oxygen to help the flame burn), sulphur (a fuel that catches fire), and powdered glass (which creates friction and heat). On the other hand, the striking surface of the matchbox contains red phosphorus (which starts the chemical reaction) and powdered glass (which helps create friction). When you strike the match on the rough strip, friction between the powdered glass generates heat, causing a tiny amount of red phosphorus to convert into white phosphorus (an easier-to-light form), which ignites in the air and sets off a chain reaction that lights the sulphur and then the wooden stick.

MORE INFORMATION: <https://chem.washington.edu/lecture-demos/match-head-reaction> • <https://www.reagent.co.uk/blog/how-do-safety-matches-work/>

SOUND 4: POPCORN POPPING

HINT: Before movie stars perform, this savoury snack is born

EXPLANATION: Lights, camera... reaction? Popcorn pops because each kernel has a tiny bit of water trapped inside it. As the kernel heats up, the water turns to steam, and pressure builds until the hard outer shell bursts open. When it bursts, the soft inside expands quickly and cools into the fluffy popcorn we eat.

MORE INFORMATION: <https://www.popcorn.org/All-About-Popcorn/What-Makes-Popcorn-Pop>

SOUND 5: WHIP CRACK

HINT: It moves around, faster than the speed of sound

EXPLANATION: A whip cracks because the tip moves so fast that it briefly moves faster than the speed of sound (which is 1,235 km/h)! This creates a tiny sonic boom, which is the sharp cracking sound you hear.

MORE INFORMATION: <https://www.abc.net.au/education/the-soundtrack-of-australia-shock-waves/102765800>

Credit/attribution: Whip Crack 01.wav by CGEffex --



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We'd love to hear your feedback on these questions! Share your thoughts with us:

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