

Sound is a wobble

Lesson at a glance

Open by humming with a hand on the throat so children feel the buzz. Collect partner predictions on what makes a sound, then run a whole-class drum-and-rice model before pairs try a flicked ruler, a plucked elastic band and another throat hum at their desks. An IWB interactive shows the drum skin wobbling and rings carrying sound to an ear. Close on the Investigation Journal page by drawing one thing that wobbled today.

Learning objectives

- Feel and describe that sounds are made when something wobbles or vibrates
- Draw one thing that wobbled to make a sound

Before the bell – prep

Night before: stretch cling film tight over an empty biscuit tin, secure with tape or a band, and stand it in a shallow tray. Day of: pinch of dry rice on the skin (hidden until exploration), one ruler and a few elastic bands per pair, desk edges cleared for overhangs.

Materials

Item	Qty	Per	Source	Low-cost substitute
30 cm plastic or wooden ruler	1	group	classroom	a sturdy strip of firm card about 30 cm long
elastic bands (medium size)	3	group	classroom	a rubber hairband or a short piece of stretchy fabric
small drum or empty biscuit tin with cling film stretched tightly over the open top	1	class	classroom	an empty yoghurt tub or ice-cream tub with cling film stretched over the top
dry uncooked rice	1	class	supermarket	dry lentils or couscous grains
Investigation Journal page	1	pupil	provided printable	a blank page with the heading My wobble that made a sound
shallow tray to stand the drum in	1	class	classroom	a baking tray, a box lid, or a large plate

**Safety watch-point**

Twang rulers and bands gently, away from faces; no aiming bands. Class-friendly drum taps only. Rice is not for eating — keep the drum in its tray so grains do not scatter.

**Teaching moves**

- **Getting Started:** Hum with your own hand on your throat so the class copies. Ask two or three children what they feel and accept buzz, tickle or shake. Keep it short — no rulers, bands or drum yet.
- **What do you think?:** Run think-pair-share on the big question: what is happening when something makes a sound? Capture three or four ideas in the children's words on the board and leave them up. Do not name vibration yet.
- **Feel the wobble:** Model the drum first from the front: wonder, predict, one class-friendly tap, watch the rice jump, then link still skin to silent. Send pairs to desks for ruler flick, band pluck-and-feel (swap roles), and throat hum — circulate asking 'What is moving? When does the sound stop?' Finish with one shared drum tap so they connect their own wobbles to the skin.
- **What did you notice?:** Whole-class oral share only. Revoice answers toward shake, buzz, jump, wiggle, still. If someone says only the hit makes the sound, point back to rice still dancing after the tap.
- **See the wobble:** Drive the drum interactive on the IWB in display mode. Children watch the skin first; you narrate the big wobble and the rings as a picture of air carrying the wobble (we cannot see air move). Then name the words: wobble/vibration, and sound as what we hear when the wobble reaches our ears. Keep any tone button class-friendly or off.
- **What was wobbling?:** Hold up each sound maker and take a quick choral or volunteered answer: free end of the ruler, the band, the throat/voice box, the drum skin. Draw out: every time we heard a sound, something was wobbling; when it stopped, the sound stopped. Revisit the board predictions.
- **Draw a wobble that made a sound:** Pupils draw one clear example on the Investigation Journal page — ruler, band, throat or drum with rice — with a simple label if they can. Circulate asking quietly: 'What was wobbling in your picture?'
- **What we found out:** Lead the join-in sentence: Sound is what we hear when a wobble reaches our ears. Invite two or three everyday notices (speaker, fridge, school bell). Collect rulers and bands along each row; lift the drum away still in its tray so rice leaves with it.

**What it should show**

Children should feel or see a wobble each time a sound is made, and notice the sound stops when the thing goes still. Rice jumps then settles on the drum skin; the free end of the ruler and the band buzz under a fingertip; the throat buzzes while humming. A drawing that shows one of today's sound makers, with the child able to point to the part that wobbled, is success. If rice barely moves, the film is too loose or the pinch too heavy — retighten and use fewer grains.





Misconceptions & interventions

- **Sound is only air coming out of the mouth, or only loud bangs.** — Point back to the silent-but-still rice and the ruler that twangs with no mouth involved. Ask: 'Was anything leaving your mouth when the ruler made its sound?'
- **Only the hit or pluck makes the sound — not the ongoing wobble afterwards.** — Tap the drum once and hold attention on the rice still dancing after your hand has left. Ask when the sound actually stopped.
- **The eye or the ear makes the sound.** — On the IWB scene, trace from the wobbling skin along the rings to the ear: the sound starts at the wobbling thing; the ear only receives it.

Differentiation

Emerging	Developing	Proficient
• Stay with the teacher at the drum station and offer one word for what they feel (jump, shake, buzz) before trying a single desk activity. • Accept a simple drawing of one sound maker; the child points to the wobbling part rather than writing a label.	• After the core tries, ask which of their three desk wobbles felt biggest, and when each sound stopped.	• Compare a soft tap and a slightly stronger tap on the drum and say which wobble looked bigger. • Fast finishers add a second tiny sketch, or whisper one everyday home wobble (speaker, washing machine) to a partner — no device task.

Cross-curricular hook

Link to English oral language: children revoice feel-words (buzz, shake, still) into the shared sentence about sound.