

Sound is a wobble

Lesson at a glance

Open by humming with a hand on the throat so pupils feel a buzz. They share quick predictions about what makes a sound, then watch rice dance on a cling-filmed tin drum and try a flicked ruler, a plucked elastic band and their own throat at desks. A display-only wobble interactive names vibration, the class matches each sound maker to what wobbled, and each pupil draws one example on the Investigation Journal page before joining the line: sound is what we hear when a wobble reaches our ears.

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, stand it in a shallow tray, and set a small pinch of dry rice aside. Per pair: one ruler and a few elastic bands. Clear desk edges so rulers can overhang. Keep the drum out of sight until the exploration beat.

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 and away from faces; no aiming bands. Keep drum taps class-friendly. Rice is not for eating — tray catches spills so nothing hits the floor.

**Teaching moves**

- **Getting Started:** Hum with your own hand on your throat and invite the class to copy. Ask two or three what they feel — accept buzz, tickle or shake. Keep it short; do not hand out rulers, bands or the drum yet.
- **What do you think?:** Pose the big question: what is happening when something makes a sound? Run a quick think-pair-share, then jot three or four ideas on the board in the children's own words. Leave them up; do not name vibration yet.
- **Feel the wobble:** Model the trayed drum first: wonder, predict, one class-friendly tap, watch the rice jump, then link wobble to sound. Send pairs to desks for ruler flick, partner band pluck-and-feel, and throat hum only — circulate asking 'What is moving? When does the sound stop?' Finish with one shared drum tap so they connect their desk wobbles to the skin.
- **What did you notice?:** Whole-class oral share only — no drawing yet. 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 wobble interactive on the IWB in display mode. Lead with the picture: skin moves, rings travel toward the ear. Name the words after looking — wobble/vibration, then sound. Keep enableTone off if the room needs quiet; the picture still teaches.
- **What was wobbling?:** Hold up each sound maker and take a 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 — and add a simple label if they can. Circulate with one quiet question each: 'What was wobbling in your picture?'
- **What we found out:** Lead the class join-in sentence: Sound is what we hear when a wobble reaches our ears. Invite two or three everyday notices (speaker, fridge, school bell). Tidy by passing rulers and bands along rows; lift the drum away still in its tray so rice leaves with it.

**What it should show**

Pupils should feel or see a wobble each time they hear a sound, 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 child who only names the hit, not the ongoing wobble, needs another look at rice still dancing after the tap.



Misconceptions & interventions

- **Some children think sound is only air leaving the mouth, or only loud bangs.** — Point back to the silent-looking ruler and band that still make a sound while wobbling, and to the quiet throat hum — sound without a bang or a big puff of air.
- **Pupils say only the hit or pluck makes the sound, not the ongoing wobble.** — Tap the drum once and keep eyes on the rice: it keeps dancing after the tap, and the sound lasts while it moves. Ask when both the rice and the sound stop.
- **Children may say the eye or the ear makes the sound.** — On the interactive, 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 use one word for what they feel (jump, shake, buzz); draw that single example with a teacher-scribed label if needed.	• Try a soft tap and a slightly stronger tap on the drum and say which wobble looked bigger; add a simple label to their Investigation Journal drawing.	• Add a second tiny sketch of another classroom example, or whisper to a partner one everyday thing at home that also wobbles when it makes a sound (speaker, washing machine).

Cross-curricular hook

Link to Music — feel the wobble on a classroom drum or ukulele string when a note is played.