

## KWL chart: sound and vibration

Year 4 science. The entries below are author-created teaching examples, not observed learner answers.

### Source used

DfE (2015 edition), National curriculum in England: science programmes of study, Year 4 Sound. The responses below are author-created teaching examples, not observed learner answers.

**Something vibrating can make a sound. Vibrations from sounds travel through a medium to the ear.**

### K · What We Know

Before reading · starting ideas to check

1. Sound can reach the ear without travelling through a medium.
2. Something vibrating can make a sound.

### W · What We Want to Know

Before reading · questions

1. What travels from a sound source to the ear?
2. How fast do these vibrations travel?

W2 stays open because the source gives no speed or number.

### L · What We Learned

After reading · source-supported entries

1. Vibrations from sounds travel through a medium to the ear.
2. Something vibrating can make a sound.

### Source checks

**K1 · Revise:** the source says vibrations travel through a medium to the ear.

**K2 · Confirm within this source:** the first sentence supports the starting idea.

**W1 · Answered:** L1 records the source-supported route. **W2 · Still open:** no speed information is supplied.

# Make a K/W/L chart

Write starting ideas in K, questions in W, then add what the source supports in L.

| K · What We Know        | W · What We Want to Know | L · What We Learned             |
|-------------------------|--------------------------|---------------------------------|
| Starting ideas to check | Questions for a source   | Answers supported by the source |
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## Source and checks · separate from K/W/L

Source title/reference:

Which Learned entries did you check against this source?

Which K idea needs revising? Which W question remains open?

## Use the source, keep open questions open

Write your answers in your notebook. All required source text is supplied. These are authored practice cases, not real classroom reports.

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### Fictional Year 7 library passage

The school library will close on Friday afternoon for a stock check. New loans can be made again on Monday morning. Already borrowed books keep their stated due dates.

Original fictional passage for this exercise, not a real school timetable or policy.

1. **Task 1.** Use the sound source. Decide what to do with K1, "Sound can reach the ear without travelling through a medium." Write the revised entry and the words that support it.
2. **Task 2.** Use the sound source to answer W1, "What travels from a sound source to the ear?" Then decide whether the source answers W2, "How fast do these vibrations travel?"
3. **Task 3.** Read the fictional library passage. Correct K1, "New loans resume on Monday afternoon." Write an L entry answering when new loans resume, and cite the source sentence.
4. **Task 4.** Use the fictional library passage to check K2, "Already borrowed books keep their due dates." Decide whether you can answer how many books staff will check. Give a useful follow-up for the unanswered question.

For the sound tasks, use the supplied source on page 1. Keep W2 open if no appropriate source gives the speed.

## Worked answers and evidence

Use these authored model answers to check the source wording. W2 stays unanswered when its source gives no speed or number.

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1. **Task 1.** Revise K1 to: Vibrations from sounds travel through a medium to the ear. The words “through a medium” contradict the original starting idea. K1 was a claim to check, not a verified fact.
2. **Task 2.** W1: Vibrations from sounds travel through a medium to the ear. W2 stays unanswered: the source gives no speed or number. Keep W2 visible for a later source rather than guessing.
3. **Task 3.** Revise afternoon to morning. L: New loans resume on Monday morning. The second sentence says, “New loans can be made again on Monday morning.” This is true within the supplied fictional passage.
4. **Task 4.** Confirm K2 within the passage: already borrowed books keep their stated due dates. The third sentence supports it. The book-count question remains unanswered because no count is given. A further source would need to supply the count; do not invent one.

### Teaching follow-up

Ask which words show why K1 needs revising. Keep W2 open until another appropriate source supplies the speed information. Do not guess a number.

Contrast morning with afternoon, then ask W1 again. Keep the book-count question unanswered rather than inventing a total.