



BRIGHTPENCIL KIDS

Grade 1 | Ages 5-7 | 12-page learning pack

Sound & Vibration Lab

LEARNING GOAL

Connect sounds with vibrating sources and compare loud/quiet and high/low sounds safely.

Study -> Practise -> Talk -> Make -> Reflect

Designed for short adult-supported sessions and independent return practice.

Purpose

Connect sounds with vibrating sources and compare loud/quiet and high/low sounds safely.

Suggested rhythm

Use 10-15 minutes. Model one example, let the child try, ask how they know, then stop while attention is still positive.

Feedback

Praise the strategy, careful observation or explanation. If an answer is wrong, ask the child to show their thinking before correcting it.

Transfer

Use the hands-on task before or after the printable page so the skill connects to real objects, talk and movement.

Safety & independence

Adult supervision is expected for cutting, small objects, outdoor exploration, water, torches or elastic bands. Adapt materials to the child.

Words & ideas to notice

SCIENCE

Say the words, use them in conversation, then return to them during the activities.

Sound

Use it in your own sentence or explanation.

Vibration

Use it in your own sentence or explanation.

Loud

Use it in your own sentence or explanation.

Quiet

Use it in your own sentence or explanation.

Pitch

Use it in your own sentence or explanation.

Talk prompt

Which of these words feels newest? Explain what you think it means and give an example connected to sound.

1

Sound begins with vibrations that travel through a medium such as air.

2

Loudness and pitch are different properties of sound.

SHOW IT ANOTHER WAY

I notice

I wonder

I predict

I found

Try it together

SCIENCE

Adult: model the first item. Child: explain what you notice or how you know.

- 1 Touch your throat gently while humming. What do you notice?
- 2 Sort sounds as usually loud or quiet.
- 3 Which changes pitch more: tapping a longer or shorter taut band?
- 4 Write one safety rule for sound investigations.

Work carefully. Draw, mark, build or write when that helps your thinking.

- 1 Touch your throat gently while humming. What do you notice?
- 2 Sort sounds as usually loud or quiet.
- 3 Which changes pitch more: tapping a longer or shorter taut band?
- 4 Write one safety rule for sound investigations.
- 5 Why should science sound tests stay at comfortable volume?

SHOW YOUR THINKING

Use the idea in a new way

SCIENCE

Work carefully. Draw, mark, build or write when that helps your thinking.

1 Which changes pitch more: tapping a longer or shorter taut band?

2 Write one safety rule for sound investigations.

3 Why should science sound tests stay at comfortable volume?

4 Does "louder" always mean "higher pitch"?

5 Touch your throat gently while humming. What do you notice?

SHOW YOUR THINKING

Talk 1 Why should science sound tests stay at comfortable volume?

Talk 2 Does "louder" always mean "higher pitch"?

Talk 3 What strategy, clue or observation helped you most with sound?

Talk 4 What mistake might someone make here? How could you help them notice it?

A complete explanation is more valuable than a fast one-word answer.

DO SOMETHING REAL

Stretch elastic bands of different thickness over a safe container with adult help.
Pluck gently and compare sounds.

RECORD WHAT HAPPENED

What I did

What I noticed

What I would try next

CREATE CHALLENGE

Design a simple sound-maker and label which part vibrates.

Use this space to draw, label, plan or draft.

Independent challenge

SCIENCE

Try without help first. Then explain or check your work with a grown-up.

- 1 Why should science sound tests stay at comfortable volume?
- 2 Does "louder" always mean "higher pitch"?
- 3 Create one new example that would help another Grade 1 learner practise sound.

MY CHECK

☐ I tried a strategy ☐ I checked it ☐ I can explain one idea

ANSWER / REVIEW NOTES

- To protect hearing.
- No; loudness and pitch are separate.

LEARNER REFLECTION

One thing I understand better now:

One thing I want to practise again:

One real-life example I can think of:

Review status: original BrightPencil draft. Educational and rights review required before public publication.