

GRADE 3 LEARNING PACK

Sound: Vibration, Pitch & Volume

Connect sound with vibration and explore how pitch and loudness can change in safe investigations.

LEARN • PRACTISE • CREATE • REFLECT

Original BrightPencil Kids resource - adult-led where appropriate

A4 edition • 12 purposeful pages • review copy

Print. Learn. Grow.

Grown-up guide

Learning objective

Connect sound with vibration and explore how pitch and loudness can change in safe investigations.

Use this pack well

- Model the first example aloud, then let the learner try.
- Ask “How do you know?” more often than “Are you finished?”.
- Use real objects, talk, movement or observation when the activity suggests it.
- Stop or shorten the session if attention or enjoyment drops.
- Open-ended pages can have many successful answers.

Quality note

This resource was written originally for BrightPencil Kids. Curriculum sources informed scope and progression only; no third-party worksheet or story text is reproduced.

Learn the idea

1 Sound is produced by vibrations that travel through a medium.

2 Pitch relates to how high/low a sound seems and is linked to vibration frequency.

3 Loudness should be investigated without unsafe sound levels.

Talk about it

Explain one idea in your own words. Give an example from real life, a drawing or an object if that helps.

Observe a ruler vibrating over a desk edge.

Compare pitch when a vibrating length changes.

Identify safe vs unsafe sound investigation choices.

Explain why touching a vibrating object can stop or change sound.

Record observations without treating “louder is better”.

Try it beyond the page

Real-world / hands-on connection

Use quiet classroom sound-makers and keep sound at comfortable levels.

Before you finish

What did you notice?

What evidence, object or example helped you?

What would you change if you tried again?

Create something

Your project

Build a safe rubber-band sound investigation diagram and predict how tension/length may affect pitch.

Use this space for planning, drawing, mapping, designing or notes.

CHALLENGE

Think deeper

1. What produces sound?

2. Should children test hearing with very loud sound?

3. What can change pitch?

Quick review

1. In one sentence, explain the big idea of “Sound: Vibration, Pitch & Volume”.

2. Draw or write one example that shows you understand.

3. Choose one activity from this pack and explain the strategy you used.

4. Write one question you still have.

Answer & discussion notes

Use these as guidance, not scripts. Open questions can have different successful responses when the reasoning is sensible and evidence-based.

1. Suggested response

Vibrations.

2. Suggested response

No.

3. Suggested response

Changes in vibration frequency, often affected by length/tension/material.

Review before publication

Check age fit, factual accuracy, clarity, accessibility, rights provenance and whether the activity works in practice. This file remains a review copy until those checks are signed off.

FINISH

My learning reflection

I finished this BrightPencil learning pack.

One thing I understand better now:

A strategy that helped me:

Something I created or noticed:

My next small question or goal:

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