

GRADE 3 LEARNING PACK

Solids, Liquids & Gases

Compare properties of solids, liquids and gases and observe changes of state using safe examples.

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

Compare properties of solids, liquids and gases and observe changes of state using safe examples.

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 Solids keep a shape more strongly; liquids flow and take container shape; gases spread to fill available space.

- 2 Heating and cooling can cause changes of state.

- 3 Changes such as melting and freezing can be reversible.

Talk about it

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

Classify everyday examples by state.

Explain what happens to ice as it warms.

Compare water in differently shaped containers.

Identify evaporation and condensation in simple contexts.

Record before/during/after observations for melting ice.

Try it beyond the page

Real-world / hands-on connection

Use only safe classroom examples such as ice/water at ordinary temperatures with adult supervision.

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

Create a state-change cycle for water with arrows and labels.

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

CHALLENGE

Think deeper

1. Does a liquid have a fixed shape?

2. What is freezing?

3. Can matter change state without becoming a different substance?

Quick review

1. In one sentence, explain the big idea of “Solids, Liquids & Gases”.

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

No.

2. Suggested response

Liquid changing to solid as it cools.

3. Suggested response

Yes.

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.

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:
