

Weather, Climate & Data Claims

Distinguish weather from climate and make cautious comparisons using longer-term temperature and rainfall data.

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

Distinguish weather from climate and make cautious comparisons using longer-term temperature and rainfall data.

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 Weather describes short-term atmospheric conditions.

2 Climate describes typical patterns over long periods.

3 Data claims should match the length, quality and scale of the evidence.

Talk about it

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

Sort twelve statements into weather observation, forecast or climate description.

Read a fictional 12-month temperature/rainfall chart.

Compare two places using median-style or average monthly patterns without stereotyping them.

Identify an overclaim based on only four hot days.

Rewrite three absolute claims using evidence-based cautious language.

Try it beyond the page

Real-world / hands-on connection

Compare a current weather report with an adult-selected climate information page and discuss why they answer different questions.

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 two-place climate comparison card using provided fictional data and three carefully worded conclusions.

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

CHALLENGE

Think deeper

1. Is “rain tomorrow” weather or climate?

2. Why do climate claims need long records?

3. What word can signal appropriate uncertainty?

Quick review

1. In one sentence, explain the big idea of “Weather, Climate & Data Claims”.

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

Weather/forecast.

2. Suggested response

Climate concerns typical patterns and variability across long periods.

3. Suggested response

May, suggests or likely, when supported by evidence.

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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