

BP-60 • Bigger Picture • Class Kit

Climate Change: Certain, Studied, Disputed

A skill-builder class kit for sorting science claims by certainty level.

Students run a structured AI prompt, then check the output against their science textbook.

Teacher note

This class kit keeps climate change in a science-literacy frame: textbook-level concepts, evidence, uncertainty, and claim-checking. It is not a political debate.

The key skill is sorting claims into three buckets: **what is certain**, **what scientists are still studying**, and **what is disputed**. Students then check AI's output against the science textbook.

1 40-minute skill-builder flow

Teacher-led, with textbook check built in.

0–5 min Hook

Ask: “Are all science claims equally certain?”
Students give quick examples.

5–15 min AI prompt

Run the structured climate prompt and project the result.

15–30 min Textbook

check
Students compare AI output with textbook definitions and diagrams.

30–40 min Discussion

Why separate certain, studied, and disputed?

☐ Class understands this is a science-literacy activity, not a political debate.

2 Run the constraint prompt

Use Perplexity if you want sources. ChatGPT, Claude, or Gemini can also explain simply.

COPY-PASTE CLASS PROMPT

Explain climate change for a Class 10 student. Only textbook-level science. Separate into:

- (1) what is certain,
- (2) what scientists are still studying,
- (3) what is disputed.

For each point, give one short explanation and say what textbook topic it connects to, such as greenhouse effect, carbon cycle, weather vs climate, fossil fuels, or ecosystems.

TEACHER MOVE

Before reading the AI answer, tell students: “AI is not the authority here. The textbook is our check.”

CAUTION BOARD

If AI gives dramatic language, political claims, or vague statements, rerun the prompt with: “Keep only textbook-level science and remove opinion.”

☐ Class ran the structured climate prompt.

3 Teach the three buckets

The goal is not just climate content. The goal is certainty sorting.

1

Certain

Well-established textbook-level science: greenhouse gases trap heat; burning fossil fuels releases carbon dioxide; climate is long-term weather pattern.

Check: textbook chapter or diagram.

2

Still studying

Questions scientists refine with new data: exact regional impacts, local rainfall changes, ecosystem responses, future risk ranges.

Check: does the claim include uncertainty?

3

Disputed

Claims people argue about, especially claims that need evidence, definitions, or policy choices. Keep class focus on what the science textbook can check.

Check: is this science, opinion, or policy?

SIMPLE TRANSLATION

Science literacy means not treating every claim the same. Some claims are settled basics. Some are active research. Some are arguments that need careful checking.

☐

Class can explain the three certainty buckets.

4 Check AI against the textbook

Students now become claim checkers.

AI claim	Bucket AI placed it in	Textbook topic to check	Textbook says	Keep / move / rewrite?
Greenhouse gases trap heat in the atmosphere.	Certain	Greenhouse effect	Check definition and diagram.	Likely keep if wording matches textbook.
One city will definitely flood by a specific year.	Maybe uncertain/disputed	Climate projections, local geography	Needs careful source and date.	Rewrite with uncertainty or remove.
Weather and climate mean the same thing.	Wrong claim	Weather vs climate	Textbook distinguishes them.	Correct it.

TEXTBOOK-CHECK PROMPT

Here is AI's explanation of climate change:
[paste AI answer]

Help me make a textbook-check table:
1. Claim

2. Which certainty bucket it is in
3. Which textbook topic to check
4. What wording I should verify
5. Whether the claim sounds certain, uncertain, or opinion-based

Do not invent textbook content.

☐ Class checked at least three AI claims against the science textbook.

5 **Discussion: why separate certain from disputed?**

Choose 3–5 questions depending on time.

DISCUSSION QUESTIONS

1. Why is it dangerous to call a certain textbook fact “just an opinion”?
2. Why is it also dangerous to pretend every detail about the future is already exact?
3. How does a scientist talk about uncertainty differently from a rumour?
4. What should a student do when AI sounds confident but the textbook is more careful?
5. Which bucket is hardest to identify: certain, still studying, or disputed?

THOUGHT BULB

Uncertainty does not mean “nobody knows anything.” It often means “scientists know the broad pattern and are still measuring the details.”

☐ Class discussed why certainty sorting matters.

6 Four-page class kit preview

Use this as a printable lesson structure.

Page 1 • Outcomes + Materials

Skill goal

Students learn to sort claims by certainty level and verify AI output against a science textbook.

Materials: AI tool, projector, Class 10 science textbook, notebooks.

Page 2 • Activity

Run and sort

Teacher runs prompt. Students label claims as certain, still studying, or disputed. Then they identify textbook topics to check.

Science literacy

Students discuss why a careful science answer separates established basics from active research and opinion-heavy claims.

My certainty rule

Students complete: “When AI explains science, I will check _____ before trusting it.”

7 Exit ticket

End with one science-literacy rule.

When AI explains science, I will check...

Example: I will check whether the claim is a textbook fact, something scientists are still studying, or an opinion/disputed claim.

CLASS CLOSER

AI can explain science quickly. A good student still asks: what is certain, what is still being studied, and what needs checking?

☐ Students completed the exit ticket.

Teacher wrap

Final board line: “**Good science reading separates certain facts, active research, and disputed claims.**”

☐ Class used AI as an explainer, not the final authority.

☐ Class verified AI output against the textbook.

☐ Class kept the discussion scientific, not political.