



6-8 Climate Action Project-Based Learning — Weekly Student Pack

NAME	DATE	CLASS / PERIOD
_____	_____	_____

What you'll learn this week

A five-session project sprint where students audit one real climate footprint at school (food waste, lights, single-use plastics, transit, paper), design one specific intervention, prototype it, measure it for two days, and pitch it on Friday to a real decision-maker (principal, head custodian, cafeteria manager, PTA). The deliverable is a 1-page proposal + a 2-minute pitch.

My goals for the week

- Session 1: I can choose a climate-impact category for their team and write a measurable baseline question.
- Session 2: I can collect a baseline measurement and convert it into a meaningful comparison (per-person, per-week, per-year).
- Session 3: I can propose one specific, low-cost, this-month intervention with predicted impact.
- Session 4: I can prototype and test their intervention for one day and revise based on data.
- Session 5: I can pitch their intervention in 2 minutes to a real decision-maker, with baseline + projected impact.



Session 1

6-8 Climate Action Project-Based Learning — Weekly Lesson Plan · Student Edition

TODAY'S GOAL

I can choose a climate-impact category for their team and write a measurable baseline question.

WORDS I NEED TO KNOW

Today's plan

1. Warm-up: Show a 90-second clip on cafeteria food waste in a real school. "How much do you think gets thrown out here..."
2. Lesson: Project frame: pick a category !' measure !' propose ONE change !' measure a...
3. Practice together: Triads pick a category and draft a baseline question. Teacher pushes specificity: not 'How much paper do we...'.
4. Practice on my own: Each team finalizes its question and a one-paragraph plan: who measures, when, what tool.
5. Exit ticket: Public commitment: each team posts its question on the wall.

MY PRACTICE — SHOW YOUR WORK

Session 1 (continued)

6-8 Climate Action Project-Based Learning — Weekly Lesson Plan

EXIT TICKET — before you leave today

Prompt: Public commitment: each team posts its question on the wall.



Session 2

6-8 Climate Action Project-Based Learning — Weekly Lesson Plan · Student Edition

TODAY'S GOAL

I can collect a baseline measurement and convert it into a meaningful comparison (per-person, per-week, per-year).

WORDS I NEED TO KNOW

Today's plan

1. Warm-up: "A number alone doesn't move anyone. Make it real." Show 'we waste 3 lbs of food a day' vs '3 lbs/day = 540...
2. Lesson: Mini-lesson on per-person + scale-up math. Two worked examples.
3. Practice together: Teams collect their baseline (during the lesson if classroom-bound; over today and tomorrow if...
4. Practice on my own: Each team computes per-person and per-year scale-up; writes one 'so what' sentence.
5. Exit ticket: Whip-around: each team shares the most surprising number.

MY PRACTICE — SHOW YOUR WORK

EXIT TICKET — before you leave today

Prompt: Whip-around: each team shares the most surprising number.



Session 3

6-8 Climate Action Project-Based Learning — Weekly Lesson Plan · Student Edition

TODAY'S GOAL

I can propose one specific, low-cost, this-month intervention with predicted impact.

WORDS I NEED TO KNOW

Today's plan

1. Warm-up: Show three student interventions from real schools (lights-off champion, paper-tray, share-table). Name what...
2. Lesson: Walk through the template. Push on 'specific': not 'use less paper' but 'install a one-side-printed reuse...
3. Practice together: Teams draft their proposal using the template.
4. Practice on my own: Predict impact: if our intervention works at 50%, the per-year savings = ____.
5. Exit ticket: Peer-critique with one rule: 'Could you start this Monday with what we already have?' If no, sharpen it.

MY PRACTICE — SHOW YOUR WORK

EXIT TICKET — before you leave today

Prompt: Peer-critique with one rule: 'Could you start this Monday with what we already have?' If no, sharpen it.



Session 4

6-8 Climate Action Project-Based Learning — Weekly Lesson Plan · Student Edition

TODAY'S GOAL

I can prototype and test their intervention for one day and revise based on data.

WORDS I NEED TO KNOW

Today's plan

1. Warm-up: "Today we run version 1. It will not work perfectly. That's the point."
2. Lesson: Set the rule: 1 day of run, then look at the data, then make ONE change. Show a revision log template.
3. Practice together: Teams deploy and start measuring.
4. Practice on my own: Mid-day check: what's working, what isn't, what's the one change?
5. Exit ticket: Each team logs one revision they'll make tomorrow.

MY PRACTICE — SHOW YOUR WORK

EXIT TICKET — before you leave today

Prompt: Each team logs one revision they'll make tomorrow.



Session 5

6-8 Climate Action Project-Based Learning — Weekly Lesson Plan · Student Edition

TODAY'S GOAL

I can pitch their intervention in 2 minutes to a real decision-maker, with baseline + projected impact.

WORDS I NEED TO KNOW

Today's plan

1. Warm-up: Show the 2-minute structure: problem (15s), evidence (30s), solution (45s), ask (30s).
2. Lesson: Demo a strong vs weak pitch — same content, different delivery. Name two moves that made the difference.
3. Practice together: Teams polish 1-page proposal + pitch script.
4. Practice on my own: Live pitch to invited decision-maker (or to a panel of teachers if external guest unavailable).
5. Exit ticket: Decision-maker responds; teams capture follow-up actions.

MY PRACTICE — SHOW YOUR WORK

EXIT TICKET — before you leave today

Prompt: Decision-maker responds; teams capture follow-up actions.



My Week — Reflection

6-8 Climate Action Project-Based Learning — Weekly Lesson Plan · Student Edition

How did it go?

One thing I'm proud I learned this week:

One thing that was tricky for me:

A question I still have:

How I'd rate my effort this week (1–5) and why:
