Lesson Plan: The Adventures of Temperature – The Battle for Balance

Classroom Context

Grade: 5th Grade (Age 10) Class Size: 20 Students

Learning Needs: 3 students with reading difficulties, 1 student with ADHD

Learning Preferences: Visual learning emphasized, group interaction encouraged

Learning Objectives

- Understand the concept of temperature anomalies through historical data visualization.
- Interpret line charts and detect upward trends.
- Connect human activity (CO₂ emissions) to changes in Earth's temperature.

Act 1: Meet the Hero – "Steady Temperature"

Objective: Introduce Earth's temperature as something that wants to stay stable.

Activity: Show a simple chart with a mostly flat temperature line and ask students how

Temperature is feeling.

Discussion: Use emojis or simple terms to express how 'Temperature' feels in this period.

Act 2: The Challenge - "CO2 and the Great Disruption"

Objective: Show how human activities lead to temperature anomalies. Activity: Present a line chart with temperature anomalies from 1880–2020. Engagement: Color-coded zones to help identify stable vs. rising trends. Story Element: Introduce 'CO₂' as the invisible force causing change.

Act 3: The Decision - "What Will You Do?"

Objective: Connect students to the idea that their actions matter.

Activity: Interactive card game to match human behaviors to temperature effects. Discussion: Talk about what causes the line to go up and what we can do to help.

Exit Ticket: Write one thing learned and one action they can take.

Modifications for Diverse Learners

- Visual supports and icons throughout.
- Group work for students with reading challenges.
- Optional video explanations.
- Movement breaks for the student with ADHD.