**DAY 1:**

1. **CLIMATE OF A PLANET**

**8:00 BREAKFAST**

**8:30 Introductions, Pre-Test, & Assignment**

**8:50 Climate Concept Map**

**9:00 ENGAGE: Heat Packs and the Conservation of Energy**

**9:10 EXPLORE: Rainbow Glasses, thermal IR camera, & EM spectrum**

**9:30 EXPLAIN: Energy and EM Radiation**

**9:50 EXTEND: People Power**

**10:20 EVALUATE: Journaling (reflection questions)**

**10:30 BREAK**

**10:45 ENGAGE: Greenhouse molecule dancing**

**11:00 EXPLORE: Glass plates greenhouse model**

**11:30 EXPLAIN: Earth’s Energy Budget**

**12:00 EXTEND: UCAR Planet interactive & Virtual Glass Plates**

**12:15 EVALUATE: Journaling (reflection questions)**

**12:30 LUNCH**

1. **CLIMATES OF THE PAST**

**1:00 ENGAGE: Molecules & Plate tectonics movies**

**1:10 EXPLORE: Sparkling water and the carbon cycle**

**1:30 EXPLAIN: Climate changes over Millions of Years**

**2:00 EXTEND: Climate TIC-TAC-TOE**

**2:20 EVALUATE: Journaling (reflection questions)**

**2:30 BREAK**

**2:45 ENGAGE: Ice Core movie**

**2:50 EXPLORE: UCAR Tree ring builder**

**3:05 EXPLAIN: Ice Age Climates (Thousands of Years)**

**3:35 EXTEND: CO2 Graph Walk**

**3:55 EXTEND: Website Walk-through**

**4:05 EXTEND: Climate Concept Map (revisit)**

**4:15 EVALUATE: Journaling (reflection questions)**

**4:30 ADJOURN**

**DAY 2**

1. **CLIMATES OF THE FUTURE**

**8:00 BREAKFAST**

**8:30 ENGAGE: Video – “Carbon Crisis in 90 Seconds”**

**8:40 EXPLORE: Discovery of Global Warming (card game)**

**9:10 EXPLAIN: Climate Forcing, Response, Sensitivity, & Feedback**

**9:55 EXTEND: Observations of Modern Climate Change**

**10:10 EVALUATE: Kagan Corners (forcing, +/- feedback, sensitivity)**

**10:20 EVALUATE: Journaling (reflection questions)**

**10:30 BREAK**

**10:45 EXPLORE: Personal Carbon Footprints**

**11:00 EXPLAIN: Carbon Cycle Jigsaw Exercise**

**11:45 EXTEND: Emissions & Climate Calculator**

**12:00 EVALUATE: Journaling (reflection questions)**

**12:15 LUNCH**

**12:45 ENGAGE: Video – Ostrich: “Warming Stopped in 1998”**

**12:50 EXPLORE: What is a Model?**

**1:15 EXPLAIN: Modern Climate Models, IPCC, and Future Climate**

**2:00 EVALUATE: Journaling (reflection questions)**

**2:10 BREAK**

**2:20 ENGAGE: Video -- Solar Power Revolution**

**2:30 EXPLORE: Climate Wedges website and game**

**2:50 EXPLAIN: Solving the Climate Problem**

**3:35 EXTEND: Inside/Outside Circle**

**3:50 EVALUATE: Post-Test**

**4:05 EVALUATE: Journaling (reflection questions)**

**4:20 CELEBRATE: Certificates & Farewell**

**4:30 ADJOURN**