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Big Question: How do the Earth's systems effect change? Or do they?

Learning Goals:

- parts of a system (carbon footprint)
- inputs (netlogo)
- outputs (netlogo)
- nesting of systems (computer models)
- subsystems within the Earth system (computer models)
 - biosphere
 - atmosphere
 - hydrosphere
 - lithosphere
- interactions of subsystems (global climate change)
- D2 Earth (b, c, d, e, f)
- D4 Earth (a)
- Physical Properties (elastic, viscous, brittle)

Model progression:

Intro: Carbon Footprint

Part 2: Net Logo (global climate change)

Part 3: Computer models of Earth
(temperature, etc.)

Overarching Goals:

Scientific Thinking
Interpreting and predicting models
Finding relationships within models
Making predictions
Scientific writing
Evidence, Evidence, Evidence

Student Progression:

1. Read models
2. Manipulate models
3. Interpret models
4. Pull evidence from models (using scientific thinking)
5. Use complex models (interpret, synthesize information, make predictions with scientific evidence for predictions)