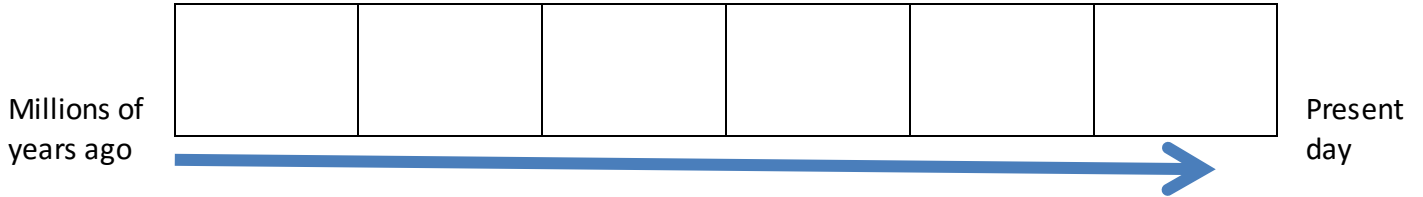


**Optional Video Assignment: Understanding the Science of Global Climate Change**

1. Which video did you watch?
  - *Climate Change: Lines of Evidence*
  - *Earth: The Operators' Manual*
2. What did you learn from that video that was new information to you?

3. What did you think was persuasive about the video?

4. Reorganize the items below into the correct timeline that considers both cause and effect as well as the sequential timing of events. Insert the letters for each item into the table below to organize the items into a logical order from left to right.



A. Carbon dioxide is a heat trapping, greenhouse gas, so increasing concentrations of CO <sub>2</sub> in the atmosphere result in rising global temperatures.
B. Ancient plants and animals die and are buried deep beneath the Earth's surface trapping carbon.
C. Increasing temperatures from increasing concentrations of carbon dioxide in the atmosphere can result in more extreme weather events, including droughts and flooding, rising sea level, and melting of ice caps and glaciers.
D. Buried remains of ancient plants and animals are subjected to intense heat and pressure beneath the Earth's surface that transform the remains into what we now call fossil fuels or hydrocarbons (large molecules made up of hydrogen and carbon atoms that contain large amounts of chemical energy).
E. Population growth combined with industrialization results in increased burning of fossil fuels, which releases increasing amounts of carbon dioxide into the atmosphere.
F. Humans begin mining and drilling for fossil fuels, including coal, oil and natural gas, to burn them and transform the stored chemical energy into useful heat and mechanical energy.