# ZOOM IN! Learning Science with Data

Our world is increasingly data-driven. To thrive in this world, students require a new level of _data literacy_—the ability to solve problems and support arguments using data.

Zoom In! Learning Science With Data is creating curriculum modules that build high school students' skills in using authentic data sets as they explore core topics in biology and earth science.

Developed by the Center for Children and Technology at Education Development Center, Inc. (EDC), and supported by the National Science Foundation, each _Zoom In_ blended learning module is a three- to four-day, standards-aligned, science inquiry, with digital supports for students as they read and analyze data to answer a scientific question, debate their interpretations, and take notes and write a culminating argument, supported by evidence.

Earth Science Modules

Climate: _How is Climate Really Changing?_
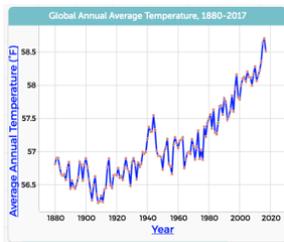
Data Set: Global and U.S. annual temperature over 120 years (NOAA)

Analysis: Students identify long-term trends in their home state, across the U.S., and globally, then forecast future temperatures.

Writing Task: Rebut a false claim about climate change, using evidence.

NGSS Core Idea: ESS3.D: Global Climate Change

Plate Tectonics: _What South American city is at greatest risk of a major earthquake?_

Data Set: Significant Earthquakes in South America, 1820–2018 (USGS)

Analysis: Students analyze historical data on earthquakes, infrastructure, and population in six countries to determine the region of highest risk.

Writing Task: Write a memo to the mayor of the city you think is at greatest risk from a major earthquake, and cite evidence to support your claim.

NGSS Core Idea: ESS2.B: Plate Tectonics and Large-Scale System Interactions

Exoplanets: _Where will we find the next Earth?_

Data Set: Exoplanet Archive, Kepler Objects of Interest (NASA)

Analysis: Students analyze data to identify the three most promising "Earth-like" planets discovered by NASA's Kepler telescope.

Writing Task: Recommend to NASA which exoplanet is the best choice for further exploration in the search for habitable worlds beyond Earth, using data as evidence to support your claim.

NGSS Core Idea: ESS1.B: Earth and the Solar System

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