

## **Vocabulary Exercise | Jamie Kruse | Sustainable Systems**

### **TOPIC: The Anthropocene**

After this vocabulary exercise students will be able to define and illustrate the word/concept of the Anthropocene and discuss the specific materials, events and actions that have contributed to its proposed acceptance by the scientific community (added to the official Geologic Time Scale by the International Union of Geological Sciences IUGS in 2016).

TIME: Approx. 2 hours

**1) WATCH/LISTEN to video “Welcome to the Anthropocene” as introduction to topic (4 minutes)**

[https://www.youtube.com/watch?v=PGtCkv7\\_nls](https://www.youtube.com/watch?v=PGtCkv7_nls)

**2) Talk about what the video shared (what is the Anthropocene, what it’s composed of). (5 minutes)**

**3) Students work in small groups to develop a possible definition of the Anthropocene based on what they heard. They can do online research. (10 minutes)**

**4) Quick report back from student groups on their definitions (10-15 minutes).**

**5) Project image of official definition and timescale (5 minutes)**

**ANTHROPOCENE:** a proposed geologic chronological term for an epoch that begins when human activities have had a significant global impact on the Earth's ecosystems.

**Project image of USGS geologic time scale encompassing 4.6+ billion years of history (visualized as spiral through time).** Show how we live at the edge of this timescale and humans evolved only in the Pleistocene. Show how geologic epochs/periods are divided and illustrated as events and explain vocabulary of geologic classification. The Anthropocene would be an additional epoch added to this timescale due to its **lasting impact upon the geologic record of the planet into the deep future.**

**7) Play the video again, this time asking students to LISTEN for words that describe what materials and events compose the Anthropocene. Try to list 10-15 words that you hear. (4 minutes)**

**8) Discuss what was heard (10 minutes).** Group brainstorm/map vocabulary list on board/projector of words mentioned in the video.

List could include:

Coal

Plastic

Industrial revolution

Nuclear materials

Railroads

Cars

Highways  
Fertilizers  
Population growth  
Great acceleration (1950)  
Marketing  
Tourism  
Rise of cities  
Extraction  
Erosion  
Green house gases  
Temperature increases  
Ozone hole  
Damming  
Mining  
Sea level rise  
Melting glaciers  
Extinction  
Ocean acidification

**9) ACTIVITY:** Distribute copies of the USGS spiral timescale and a blank “future” oriented timescale. Students will have **30 minutes** to draw/illustrate the future timescale with events/materials that compose the Anthropocene and impact geologic futures. Students should research and place a minimum of 10 events/materials on the timescale (i.e. invention of plastic, or a specific glacier that has melted, when Ozone was compromised etc.).

**\*Culture note:** At least one event or material should be **specific to the students’ home country** (a particular dam, building project, mine, type of agricultural practice, loss of species etc.).

Students should also draw a title for their timescale and provide a definition for the Anthropocene at the bottom of their drawing.

**10) Presentation and discussion of timescales (pin-up and critique). 30 minutes**