

February 18, 2017

## 2016 shattered Earth's heat record

### Quest Through the Archives

**Directions:** After reading the article "[2016 shattered Earth's heat record](http://www.sciencenews.org)," use the archives at [www.sciencenews.org](http://www.sciencenews.org) to answer these questions:

1. Search for the earliest published article about factors that affect climate in the *Science News* archives. What is it about?
2. Search for the earliest published article you can find that discusses suggested government interventions on climate change in the *Science News* archives. What studies are discussed?
3. Find at least two articles that share progress made in scientific research for techniques used to combat climate change. What ideas do they present?

## Responses to Quest Through the Archives

1. Search for the earliest published article about factors that affect climate in the *Science News* archives. What is it about? Possible student response: "[Ozone may control world heat supply](#)," published on 11/22/1924, discusses the role that ozone plays in trapping heat in the atmosphere and its effect on climate.
2. Find at least two articles that share progress made in scientific research for techniques used to combat climate change. What ideas do they present? Possible student response: "[Scientists Advise Congress](#)," published 4/9/1960, outlines the need for government-supported satellite studies to observe energy input and output in Earth's atmosphere. The article goes on to mention that the continued consumption of fossil fuels might be altering the climate and geography, so gathering appropriate data to monitor such changes is important.
3. Find at least two articles that share progress made in scientific research for techniques used to combat climate change. What ideas do they present? Possible student response: "[Volcanic rocks help turn carbon emissions to stone—and fast](#)," published online 6/9/2016 discusses solidifying excess carbon dioxide emissions by pumping carbon dioxide into basaltic lava rock. Though this is an expensive process, it doesn't require monitoring over time. "[There's something cool about Arctic bird poop](#)," published 11/15/2016, discusses how researchers discovered that the ammonia produced by bacteria that consume Arctic bird poop can help form clouds. More cloud surface area reflects a larger percentage of sunlight and helps to keep Earth cool.