

Deadly METEORS



Meteors brought water and minerals to earth, making life possible. By killing off the dinosaurs, an asteroid impact allowed human beings to evolve. Meteors carved our landscape and have influenced the ways humans have interacted with the environment. For example, it was a meteor that helped create Chesapeake Bay, the location of key events in U.S. history. But the possibility of a future meteor attack also leaves our planet vulnerable. Viewers will learn how meteors have made their mark on human history and may also impact our future.

Curriculum Links

H2's *Big History* series is a great fit with a range of courses and units on history, science and technology, social studies and global studies. It is most appropriate for high school students but is suitable for middle school students as well. The series can be used as a companion to the Big History Project online course and curriculum. (Visit www.bighistoryproject.com to learn more.)

Identification Terms

The terms below are used in this episode; defining them will help students understand some of the concepts explored in this series. Using a dictionary or another resource, students can find definitions for these terms before or after watching the episode. As they are watching, students can also keep a list of terms from each episode in the *Big History* series to define.

asteroid

axis

bereft

catastrophic

comet

demise

meteoroid

orbit

pummeling

void

Discussion Questions

1. What is an example of the ways meteors have shaped Earth's landscape? What is an impact crater?
2. How was the moon formed? How does the moon affect the Earth?
3. How did metals arrive on Earth? What is an example of human innovation with metal discussed in this episode?
4. How might meteors be responsible for life on Earth?
5. Why do researchers now think dinosaurs disappeared?
6. What is a near-Earth object and why are they important?



Extended Activities

- 1. Comets, Asteroids, Meteors, Meteoroids and Meteorites.** This episode explores the history and impact of several solar system bodies and phenomena. Choose one of these and write a short essay defining and explaining its influence on Earth, or define each of the terms in the title of this activity and create a short visual presentation about them.
- 2. Forming the Moon.** The moon is critical to Earth's existence. Based on what you learned from this episode and your own research, depict the formation of the moon through a drawing, presentation, essay or any other format. Why does the Earth need the moon?
- 3. Impact Craters.** Explore the history of impact craters. How have they shaped our landscape? Based on your own research, choose one impact crater and write about its effect on Earth from a Big History perspective.
- 4. Dinosaurs No More.** This episode reveals one current theory about why dinosaurs became extinct. Write a short synopsis of this theory – do you agree or disagree with this assessment?

Reflections After Watching

What were the three most interesting things you learned from watching this episode of *Big History*?

Web Links

Short video about asteroids and meteors:

www.history.com/shows/the-universe/videos/the-universe-backyard-astronomer-seeing-asteroids--meteors

Short videos and background info about why dinosaurs disappeared:

www.history.com/topics/why-did-the-dinosaurs-die-out

Big History Project:

www.bighistoryproject.com

Related Reading

NOTE: These books are recommended for educators and advanced student readers who may want to read selections from these books to further their understanding of the topics explored in this episode.

Bevan, Alex and John De Laeter. *Meteorites: A Journey Through Space and Time*. (Smithsonian, 2002).

Eicher, David J. *Comets!: Visitors from Deep Space*. (Cambridge University Press, 2013).

Fastovsky, David E. and David B. Weishampel. *The Evolution and Extinction of the Dinosaurs*. (Cambridge University Press, 2005).

Gaz, Stan. *Sites of Impact: Meteorite Craters Around the World*. (Princeton Architectural Press, 2009).

