

Meet the Meteoroids...

Purpose

The purpose of these activities is to learn about meteoroids, meteors, and meteorites. Students will practice use of dictionaries/glossaries, as well as internet resources, for vocabulary review and research. They will also gain a greater understanding of meteoroids, meteors, and meteorites by engaging in discussions, writing activities, and art projects that will help students communicate their thoughts on the subject.

Students will be able to

1. Define the terms meteoroid, meteor, and meteorite.
2. Compare and contrast meteoroids, meteors, and meteorites.
3. Communicate an understanding of meteoroids, meteors, and meteorites, both in written and oral form.
4. Write creatively about meteoroids, meteors, and meteorites.
5. Model meteoroids, meteors, and meteorites.

Important Vocabulary (key terms in bold)

comet	asteroid	meteorite	meteoroid
meteor	meteor shower	impact	crater
orbit	find	fall	stony
iron	stony-iron	micrometeorites	metal
minerals	chondrite	achondrite	bolides
shooting star	radiant	trajectory	fireball

Meet the Meteoroids...

Students write a one to three paragraph description of a “falling/shooting star” they have seen. (If they haven’t seen one, students describe what they think one might look like.) Then, students engage in a discussion about meteoroids, meteors, and meteorites. Some basic questions to consider: 1. Is a comet the same thing as a meteor? 2. What is a meteor shower, and when does one occur? 3. What is the difference between meteoroids, meteors, and meteorites? Students should take notes and define key vocabulary terms during the discussion.

The Meteorites and Me

Students write short stories about meteor showers, with themselves as the main character, and using vocabulary terms throughout. (Note: review short story elements if necessary.)

Understanding Meteoroids, Meteors, and Meteorites

Students further research meteoroids, meteors, and meteorites using library and internet resources; and summarize their learning in small groups. In each group, the students write an outline and assign each group member a portion of it; each member writes one to three paragraphs. The groups make oral presentations to the class—or alternatively, video taped presentations are handed in to the teacher.

Making Meteors

Students model/depict meteoroids, meteors, and/or meteorites, using artistic mediums such as clay, recycled goods, paint, etc. Students may work individually, in pairs, or in small groups. Alternatively, students may work as a class to create larger pieces.

Helpful Resources

Here are some helpful resources related to the topic of meteoroids, meteors, and meteorites.

1. NASA website that helps tie topic to asteroids and comets
<http://spacelink.nasa.gov/Instructional.Materials/Curriculum.Support/Space.Science/Meteoroids.to.Meteorites/.index.html>
2. Enchanted Learning's website with basic information
<http://www.enchantedlearning.com/subjects/astronomy/meteor/meteorshowers.shtml>
3. An extension lesson in mathematics, from the Thursday's Classroom site
<http://www.thursdaysclassroom.com/27jul01/teach4.html>
4. An extension lesson for discussion and reading comprehension, from the Thursday's Classroom site
<http://www.thursdaysclassroom.com/27jul01/teach1.html>
5. "Meteoroids, Meteors, Meteorites, and Tektites" information, perfect for [independent] background reading, from the Museum Astronomical Resource Society Astronomy Club
<http://www.roamingastronomer.com/marsastro/meteors.htm>
6. A book that discusses the history of meteors, types of meteorites, etc., including stories/legends, photographs/illustrations, and a timeline of meteor discoveries
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