VESUVIUS ERUPTS

Joseph Mallord William Turner, a British artist who lived between 1775-1851, created this watercolor called “Vesuvius in Eruption” sometime between 1817 and 1820. Part of the Paul Mellon Collection, the work is currently maintained at Yale University’s Center for British Art.

Although Pompeii is neither in the earthquake zone nor in the world’s "Ring of Fire," earthquakes and volcanic eruptions can, and do, occur outside those zones. Vesuvius had erupted before 79 A.D. (notably in 5960 and 3580 B.C.) It has erupted several times since (in 1631, 1779, 1906 and 1944).

Using Pliny’s letters with evidence from subsequent Vesuvius eruptions and similar volcanic explosions like Mt. Pinatubo and Mt. St. Helens, we can piece together how Pompeii was destroyed. And, using the ruins themselves as an incredible living museum, we can see what was left when Vesuvius froze Pompeii in time.

Pliny’s mother first noticed an unusual cloud between 2 and 3 in the afternoon. From their distance of 18 miles, or so, the cloud looked like "a pine tree" rising from a mountain. (They could not tell it was from Vesuvius.)

> *Some of the cloud was white, in other parts there were dark patches of earth and ash.*

Fire was not shooting out of the mountain. That came later.

Monstrous smoke clouds dumped debris on Pompeii during the afternoon and early evening of August 24th. Dust, ashes, cinders, tephra and rocks fell on the town for about 8 hours. Heaps of tephrite (rocks) landing on houses caused roofs to collapse. Buildings began to crack diagonally from in-plane loading and shear deformation.

Pliny was the first person to describe the phenomenon scientists now call a "Plinian" event. It is a sustained, explosive eruption which generates a high-altitude column of volcanic material and blankets large areas with ash. The "pine tree" effect, described in Pliny’s letter, is called a Plinian column.

The driving force behind all of this activity is volcanic gas which pushes hot, molten material like magma (located below the earth’s surface) out of the mountain. What we first see are monstrous clouds of smoke and ash. (Follow the link to see an amazing USGS picture of one particle of volcanic ash as viewed through the lens of a scanning electron microscope.)

See Alignments to State and Common Core standards for this story online at:
http://www.awesomestories.com/asset/AcademicAlignment/VESUVIUS-ERUPTS-Pompeii

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Media Stream

Vesuvius in Eruption

Joseph Mallord William Turner, a British artist who lived between 1775-1851, created this watercolor called “Vesuvius in Eruption” sometime between 1817 and 1820.
Part of the Paul Mellon Collection, the work is currently maintained at Yale University’s Center for British Art.

Gillian Forrester, a curator at the Center, tells us more about this watercolor:
The eighteenth-century fascination with volcanoes, and Vesuvius in particular, deepened in the nineteenth century, fueled by the eruptions of Vesuvius in 1794, 1807, 1819, and 1822.

Turner was alert to both the intellectual and aesthetic possibilities that the evolving discipline of geology offered; he cultivated friendships with pioneering geologists, including John MacCulloch and Charles Stokes, and his sketchbooks contain detailed records of geological phenomena.

During the second decade of the nineteenth century Turner, a keen proponent of the Sublime, had his own burst of volcanic activity. In 1815 he exhibited his canvas “The Eruption of the Souffrier Mountains, in the Island of St Vincent” (Butlin and Joll, 1984, no. 132); two years later the print publisher W. B. Cooke commissioned Turner to make companion watercolors of Vesuvius, showing the volcano in eruption and repose (Wilton, “Turner”, 1979, nos. 698–99).

This watercolor, the third of the group and the most spectacular, would also have been made around the same time as Cooke's drawings, if the inscription on the back, which is not in Turner's hand, is correct. Turner did not visit Italy until 1819, and he may have based the Vesuvius drawings on the work of another draftsman, most likely James Hakewill, whose sketches Turner used for a group of watercolors commissioned as designs for Hakewill’s publication “Picturesque Tour of Italy.”

Although the Center’s Vesuvius drawing was neither exhibited nor engraved, its extremely high degree of finish suggests that Turner had made it for a specific purpose, perhaps as a commission.

Although Turner's patron Walter Fawkes owned the watercolor, it was not included in Fawkes’s exhibition of his collection at his London house in 1819, which featured his outstanding holdings of Turner’s work. The work was probably acquired by Fawkes (and possibly even made) sometime later.
The work is a watercolor, created with “gum and scraping out on medium, slightly textured, cream wove paper, mounted on thick, smooth, cream wove paper.” It measures 11 1/4 x 15 5/8 inches (28.6 x 39.7 cm).

Click on the image for a better view.
Joseph Mallord William Turner, sometime between 1817 and 1820. Part of the Paul Mellon Collection, the work is now owned by Yale University's Center for British Art.
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Vesuvius - 1779 Eruption

Image, and information, online courtesy "Explore Italian Volcanoes."
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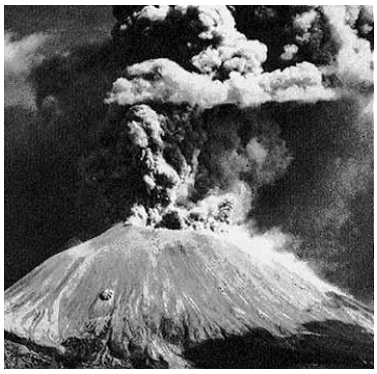

Vesuvius - 1944 Eruption

Image, described above, online via Oregon State University's "Volcano World."
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Vesuvius - Evidence of Eruptions

Image online via "Explore Italian Volcanoes."
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Mount St. Helens

Image of photo, depicting Mt. St. Helens erupting in 1980, online via USGS.
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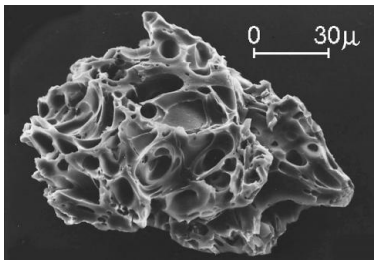

Particle of Volcanic Ash - Highly Magnified

Image online, courtesy USGS.
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Volcanic Gas Escaping from Volcano

Image online, courtesy the U.S. Geological Survey.
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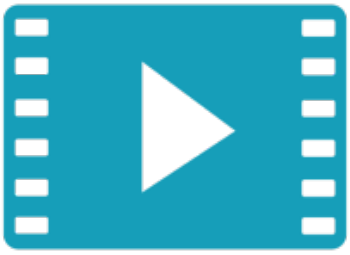

Volcanic Eruption - Underwater and On-Camera

Video, courtesy of Submarine Ring of Fire 2006 Exploration, NOAA Vents Program.
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