**8th Grade Literacy Fusion Article: “Study Shows Volcanoes May Be Causing Global Cooling”**

We have known for a while that massive volcanic eruptions, which eject massive amounts of gases into the atmosphere, can block enough solar radiation to have an effect on the climate. For example, scientists believe the explosion of the Indonesian volcano Mt. Tambora in 1815 caused the severe cold spell in 1816. But while scientists may have arrived at a consensus that our planet is warming, according to a new study published this week, some of the warming effects have been offset by small volcanic eruptions over the last decade. The vast quantities of ash and gases ejected from the volcanoes have had a remarkable cooling effect on the climate, by blocking solar radiation.

Scientists have known for some time that eruptions can cool the atmosphere because of the sulfur dioxide that is ejected into the air during eruptions. These droplets of sulfuric acid, which form when the gas combines with oxygen in the upper atmosphere, can persist for many months and will reflect sunlight away from the Earth, thus lowering surface temperatures below.

But, the new study by scientists at the Massachusetts Institute of Technology reveals that relatively small volcanic eruptions can also curtail the increase of greenhouse gases, and greatly impact the temperatures on the planet.

Scientists believe these small eruptions over the last decade may explain why the warming effect of the Earth has slowed down in recent years, falling short of matching levels predicted by scientists based on the amount of carbon entering the atmosphere, Discovery News reported, adding that small-scale ejections could be responsible for almost halving the rate of global warming.

The study, published in the journal Geophysical Research Letters, focused on the effects of aerosol particles that are expelled into the atmosphere by powerful eruptions. For the study, scientists used balloons, laser radar and ground-based measurements to analyze the impacts of these vaporized particles.

Scientists found that about a dozen small volcanic eruptions across the world over the last fifteen years may have cooled the temperatures on Earth by 0.05 degrees to 0.12 degrees Celsius since 2000. During this time, global warming has also slowed.

**8th Grade Literacy Fusion Article: “Study Shows Volcanoes May Be Causing Global Cooling”**

We have known for a while that massive volcanic eruptions, which eject massive amounts of gases into the atmosphere, can block enough solar radiation to have an effect on the climate. For example, scientists believe the explosion of the Indonesian volcano Mt. Tambora in 1815 caused the severe cold spell in 1816. But while scientists may have arrived at a consensus that our planet is warming, according to a new study published this week, some of the warming effects have been offset by small volcanic eruptions over the last decade. The vast quantities of ash and gases ejected from the volcanoes have had a remarkable cooling effect on the climate, by blocking solar radiation.

Scientists have known for some time that eruptions can cool the atmosphere because of the sulfur dioxide that is ejected into the air during eruptions. These droplets of sulfuric acid, which form when the gas combines with oxygen in the upper atmosphere, can persist for many months and will reflect sunlight away from the Earth, thus lowering surface temperatures below.

But, the new study by scientists at the Massachusetts Institute of Technology reveals that relatively small volcanic eruptions can also curtail the increase of greenhouse gases, and greatly impact the temperatures on the planet.

Scientists believe these small eruptions over the last decade may explain why the warming effect of the Earth has slowed down in recent years, falling short of matching levels predicted by scientists based on the amount of carbon entering the atmosphere, Discovery News reported, adding that small-scale ejections could be responsible for almost halving the rate of global warming.

The study, published in the journal Geophysical Research Letters, focused on the effects of aerosol particles that are expelled into the atmosphere by powerful eruptions. For the study, scientists used balloons, laser radar and ground-based measurements to analyze the impacts of these vaporized particles.

Scientists found that about a dozen small volcanic eruptions across the world over the last fifteen years may have cooled the temperatures on Earth by 0.05 degrees to 0.12 degrees Celsius since 2000. During this time, global warming has also slowed.