

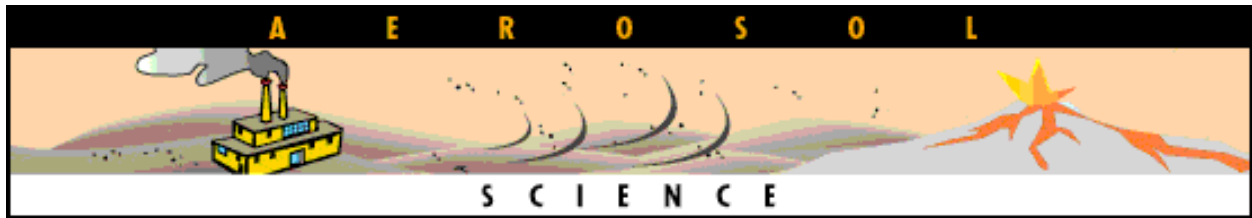
ANSWERS:

VOLCANO DATA TABLE:

Volcano	Location	VEI*	Year	Avg. Temp (Celsius) That Year**	Avg. Temp (Celsius) This Year**	Change in Temp. (next year-eruption year)
Krakatoa	Indonesia	6	1883	14.60	14.35	-.25
Torawera	New Zealand	5	1886	14.60	14.48	-.12
Santa Maria	Guatemala	6	1902	14.75	14.64	-.11
Ksudach	Russia	5	1907	14.57	14.70	+.13
Katmei	USA	6	1911	14.71	14.72	+.01
Novarupta	Alaska	6	1912	14.72	14.77	+.05
Cerro Azul	Chile	5	1932	15.02	14.87	-.15
Paracutin	Mexico	5	1943	15.03	15.11	+.08
Benzymi-anny	Russia	5	1955	14.94	14.83	-.11
Mauna Loa	Hawaii	4	1976	14.79	15.16	+.37
St. Helens	USA	5	1980	15.28	15.39	+.11
El Chichon	Mexico	5	1982	15.07	15.29	+.22
Kilauea	Hawaii	4	1983	15.29	15.11	-.18
Nevado del Ruiz	Columbia S.America	3	1986	15.16	15.32	+.16
Pinatubo	Philippines	6	1991	15.41	15.13	-.28

* From Volcano World

** From The United Nations Environment Program



ANSWERS:

MEAN CALCULATIONS:

VEI*	Positive Temp. Changes (°C)	Negative Temp. Changes (°C)	TOTAL divided by number of items	MEAN (Average)
3	+.16		+.16/1	+.16
4	+.37	-.18	+.19/2	+.095
5	+.13, +.08, +.11, +.22	-.12, -.15, -.11	+.16/7	+.023
6	+.01, +.05	-.25, -.11, -.28	-.58/5	-.116

SUMMARY QUESTIONS:

1. Which VEI values showed an average *increase* in temperature for the year after the eruption?

3, 4, 5

2. Which VEI values showed an average *decrease* in temperature for the year after the eruption?

6

3. What might this indicate about whether volcanic eruptions can cause the climate to cool?

the higher V.E.I.s can possibly cause the climate to cool

Do all eruptions cause the climate to cool? Or only certain categories? Explain.

NO! much more evidence is needed

4. Write a paragraph summarizing what you have learned and how you know this: "Do volcanoes definitely affect the climate?"

Answers will vary. Accept all reasonable answers.

ANSWERS:

V.E.I vs. ΔT (Change in Temp.)

