

# DO NOT WRITE ON THIS PAPER!

## Global Science: Reading Response Prompts

ICS Book, page 19: *Topography of Volcanic Regions*

Answer these on your own SENBP. Do not copy the question. Just write the answers.

Use **complete sentences**, unless your teacher tells you otherwise.

1. Define the following in your own words: **contour line**, **contour interval**, **topographic map**, and **relief**.
  2. Why do you think that contour lines never cross?
  3. When contour lines are far together, what does that mean?
  4. Why are some contour lines darker than others?
  5. What **two** events can change the shape of a volcano's cone very quickly?
  6. Why would the shape of a volcano's cone change after it becomes dormant?
  7. According to the reading, what has a very great effect on the shape of a still-forming volcano?
  8. What happens inside **magma** as it cools?
  9. Look at page 14 in Unit 2 of your *Captain's Log*. List the minerals that might have formed as magma from both volcanoes cooled. Explain how these might have formed.
  10. How does **igneous** rock form?
  11. Why is describing igneous rock by the percent of "oxides" a *fake* way to describe them?
  12. What is the chemical formula for **silica**?
  13. What does it mean if magma contains a **lot** of silica? *You need to have at least three (3) pieces of information in this answer!*
  14. How would *shaking a can of soda* before opening it be like a silica-rich magma volcano?
  15. What is a **shield cone** volcano? How does it form?
  16. Why does this article mention toothpaste?
  17. What is a **composite cone** volcano? How does it form?
  18. "Gooney," oozing lava is described by what term in this article?
  19. Why are composite cones tall and steep?
  20. What's the difference between a **caldera** and the **original vent** of a volcano? How does a caldera form?
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- Look at Figure 1 (page 20). Answer questions 21-22 by using the information in that table.**
21. You have a sample of magma that is approximately 70% silica. *It's a new sample from an active volcano.* What would you tell the people living on the slope of that volcano?
  22. Which type of magma listed would produce the most rapidly moving lava flow? Remember to include data from the table in your answer.
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23. Look again at page 14 in Unit 2 of your *Captain's Log*. What type of volcano cone does each volcano listed on this page have? Explain why you gave those answers by using data from that page and information from this article.

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