1. If the plume model in Study 1 is typical of all mantle plumes, the scientists would generalize that the heads of plumes are:

   A. approximately half the diameter of the tail.
   B. approximately twice the diameter of the tail.
   C. the same diameter as the tail.
   D. half as dense as the tail.

2. The scientists in Study 3 hypothesized that the larger the volume of lava produced, the larger the number of marine organisms that would become extinct. If this hypothesis is correct, the formation of which of the following plateaus caused the largest number of marine organisms to become extinct?

   F. Plateau A
   G. Plateau B
   H. Plateau C
   J. Plateau D

3. Based on the results of Study 2, a flood basalt plateau that produced lava for a period of 1.8 Myr would most likely have a lava volume:

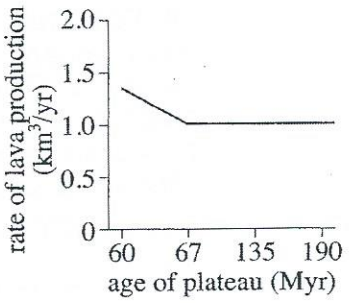
   A. between 1,440,000 km^3 and 1,500,000 km^3.
   B. between 1,500,000 km^3 and 2,000,000 km^3.
   C. between 2,000,000 km^3 and 2,125,000 km^3.
   D. over 2,125,000 km^3.

4. According to Study 2, which of the following statements best describes the relationship, if any, between the age of a flood basalt plateau and the length of time lava was produced at that plateau?

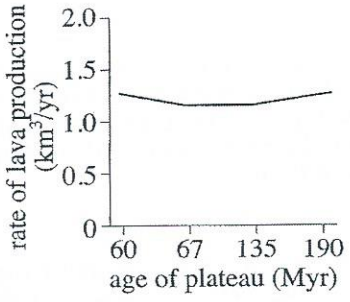
   F. As the age of a plateau increases, the length of time lava was produced increases.
   G. As the age of a plateau increases, the length of time lava was produced decreases.
   H. As the age of a plateau increases, the length of time lava was produced increases, and then decreases.
   J. There is no apparent relationship between the age of a plateau and the length of time lava was produced.

5. Which of the following graphs best represents the relationship between the age of a flood basalt plateau and the rate of lava production?

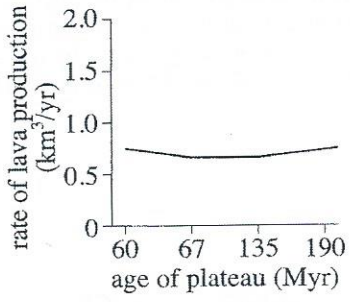
   A.



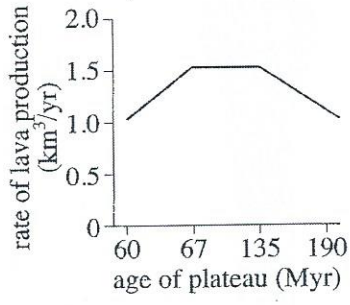
   B.



   C.



   D.



6. If the hypothesis made by the scientists in Study 3 is correct, evidence would most likely be found of another extinction of marine organisms that occurred around:

   F. 77 Myr ago.
   G. 191 Myr ago.
   H. 250 Myr ago.
   J. 314 Myr ago.