1. Approximately when, where, and by whom was writing first invented? What did they use it for? What proof is there?

2. 'alep was the Phoenician word for “ox” [following Semitic transcription from Sampson]
   a) Write the Phoenician letter for the first sound in this word.
   b) What does this letter depict?
   c) Phoenician writing was “acrophonic” (from Greek ‘acro’ = “tip” + ‘phone’ = “sound”)
      Explain the acrophonic principle by briefly describing (or drawing a diagram of) the relationship between the ox, the picture of the ox, the word for the ox, the sound that begins the word, and the sign for the sound.
   d) Write the modern Latin (English) letter that corresponds to Phoenician 'alep.
   e) Earn up to 6 points of extra credit by writing the Phoenician letters named bet, gimel, and dalet, with their modern descendants in the Latin alphabet.

3. Why do we call our writing system the “alphabet”?

4. The alphabetic writing system used for English is “phonographic” or phonetic — based on sounds. Name a writing system currently in use that is “logographic” — based on words. Explain your reasons briefly.

5. Compare four alphabets (on separate sheet), descended from the ancient Semitic alphabet: Phoenician, 1000 BC; Greek, 400 BC; Roman, 100 AD; Carolingian, 900 AD.
   Which alphabet has the most bilateral symmetry? Which the least?
   
   In the period from before 600 BC to sometime after 500 BC, Greek inscriptions were cut in a style called boustrophedon, the “ox turning” style, so named because the path of writing traced right to left and then turned and went left to right, like a farmer plowing a field with a plow drawn by an ox (Greek ‘bous’). (The fields between Sand Hill Road and San Francisquito Creek are mowed by tractor. Would you call that “tractorstrophedon”?)
   
   From the historical inscriptions, the dates of the alphabets, and the acrophonic principle discussed above, explain the changes in the symmetry (or lack thereof) of the letterforms over the centuries?

6. Printing with moveable type (using individual, separate characters) is said to have been invented by Bi Sheng in China in the 11th century AD, 400 years before Gutenberg's similar invention in Europe in 1455. Although used in Korea to some extent, printing from moveable type never became widespread in Asia, and nearly died out by the 17th century. Whereas, it became overwhelmingly popular in Europe within a short time after its invention there. What difference in the writing systems might have caused the different degree of success of printing technology in the two continents?

7. Some people don't like to see capital and lower-case letters mingled in words. for other people, absence of capitals or TOO MANY CAPITALS IS equally DISTRESSING. Drawing on your knowledge of the history of letters, or winging it with sheer inspired idiosyncratic guesswork, can you explain why we place so much importance on “case”? Are there rules of capitalization? Does anyone care if we break them? Why?
8. The modern typewriter or terminal keyboard (ASCII) contains several characters derived from Greek and Latin. Some seem rather mysterious but usually have simple explanations. Give the modern keyboard character and briefly explain how it was (or might have been) derived, for the following:

**LATIN**

a) et = “and”
b) ad = “to, at”
c) numerus = “number”
d) per centum = “of one hundred”

Give the modern keyboard character and modern (or classical) name for the following:

**GREEK**

d) _______ = “little star”
e) _______ = “little spit (spear)”

Are these characters iconic, indexical, or symbolic?
Are they phonetic, syllabic, or logographic?

9. There are basic or “archetypal” typeface variations of typefaces in common use, including:

   a) roman/italic
   b) normal/bold
   c) serif/sans-serif

These three pairs of oppositions can be combined into eight styles, such as “normal roman serif”, “bold roman serif”, “bold sans-serif italic”.

In everyday print, which of these combinations do you think is the most common? Which the least? Can you explain why? (Try ranking the eight possible combinations in terms of frequency of usage. Hint: which variations “mark” text?)

10. Do the letters we use today on computer printers and display screens look like the letters that clerks wrote by hand a hundred years ago? That scribes wrote 1000 years ago? Explain.

What do you think the letters of the future will look like?
Briefly explain.