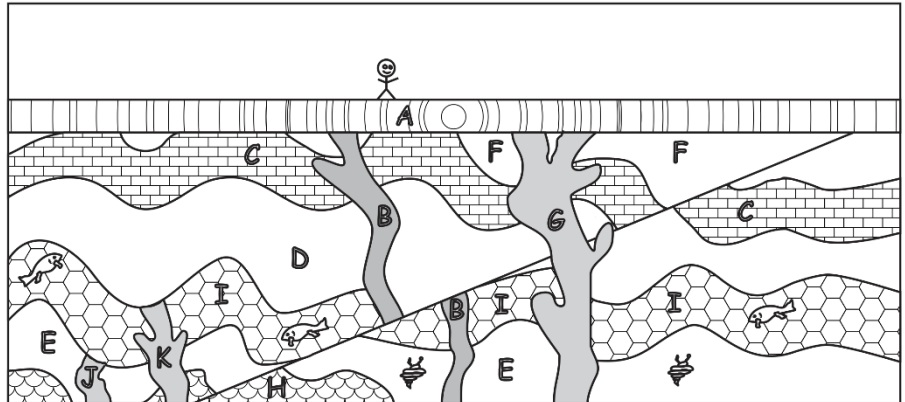Organize the lettered rock samples from oldest to youngest. Then make a mark where the earthquake occurred in the sequence.

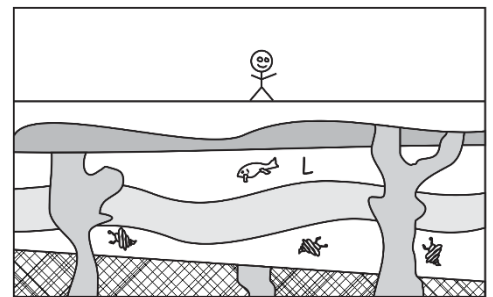| Oldest										Newest

1.   Sample G contains 27 K-40 parent atoms and 17 Ar-40 daughter atoms.

a.   What percentage of those atoms are parent atoms?

1%   21%   41%   61%   81%

b.   Which of the following is closest to the age of Sample H?

1by   2by   3by   4by   5by

2.   Sample K contains 16 K-40 parent atoms and 48 Ar-40 daughter atoms.

a.   What percentage of those atoms are parent atoms?   7%   17%   27%   47%   77%

b.   Which of the following is closest to the age of Sample G?

1by   2by   3by   4by   5by

3.   Sample B contains 11 K-40 parent atoms and 17 Ar-40 daughter atoms.

a. What percentage of those atoms are parent atoms?
    19%   39%   59%   79%   99%
b. Which of the following is closest to the age of Sample I?
    1by   2by   3by   4by   5by

4.   Sample J contains 18 K-40 parent atoms and 165 Ar-40 daughter atoms.

a.   What percentage of those atoms are parent atoms?
    10%   30%   50%   70%   90%

b.   Which of the following is closest to the age of Sample J?
    1by   2by   3by   4by   5by

5.   How many years ago did the Earthquake create the fault in the top diagram?
    0-1by   1-2by   2-3by   3-4by   4-5by

6.   The diagram on the right shows rock samples from another location on Earth. Choose the most likely age range for layer L, in that diagram.
    0-1by   1-2by   2-3by   3-4by   4-5by

Half-life = 1.5 billion years