



Use Diagram 1 to answer questions 1-10.

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|---|---|
| 1. Which rock layer is barely younger than I? _____ | 2. Which layer is barely older than I? _____ |
| 3. Which rock layer is barely younger than A? _____ | 4. Which layer is barely older than A? _____ |
| 5. Which rock layer is barely younger than N? _____ | 6. Which layer is barely older than N? _____ |
| 7. Which rock layer is barely younger than F? _____ | 8. Which layer is barely older than F? _____ |
| 9. Which rock layer is barely younger than J? _____ | 10. Which layer is barely older than J? _____ |

The samples below contain atoms of a radioactive element which has a half-life of 4 million years. Use the graph on the back to determine the age of each sample. **DARKEN** the correct choice for each sample.

Example: (a) 5-6 (b) 6-7 (c) 7-8 (d) **8-9** (e) 9-10

Sample	# of Parent Atoms	# of Daughter Atoms	% Which Are Parent Atoms	Age of Sample (Millions of years) CHOOSE ONE OF THESE
B	14	37		(a) 5-6 (b) 6-7 (c) 7-8 (d) 8-9 (e) 9-10
L	10	21		(a) 5-6 (b) 6-7 (c) 7-8 (d) 8-9 (e) 9-10
(E)	12	10		(a) 0-1 (b) 1-2 (c) 2-3 (d) 3-4 (e) 4-5
W	7	24		(a) 5-6 (b) 6-7 (c) 7-8 (d) 8-9 (e) 9-10
O	35	4		(a) 0-1 (b) 1-2 (c) 2-3 (d) 3-4 (e) 4-5
V	25	29		(a) 0-1 (b) 1-2 (c) 2-3 (d) 3-4 (e) 4-5
R	8	33		(a) 5-6 (b) 6-7 (c) 7-8 (d) 8-9 (e) 9-10
H	12	4		(a) 0-1 (b) 1-2 (c) 2-3 (d) 3-4 (e) 4-5
(J)	32	18		(a) 0-1 (b) 1-2 (c) 2-3 (d) 3-4 (e) 4-5
T	23	36		(a) 5-6 (b) 6-7 (c) 7-8 (d) 8-9 (e) 9-10

Use your answers to the previous questions, and the diagram above, to determine the ages of the rock layers and the earthquake below. Circle the correct answers.

Rock Layer or Event	Age (Millions of Years) CHOOSE ONE OF THESE
F	(a) 0-3 (b) 3-5 (c) 5-7 (d) 7-10
G	(a) 0-2 (b) 2-4 (c) 4-6 (d) 6-8 (e) 8-10
N	(a) 0-2 (b) 2-4 (c) 4-6 (d) 6-8 (e) 8-10
A	(a) 0-2 (b) 2-4 (c) 4-6 (d) 6-8 (e) 8-10
EARTHQUAKE	(a) 0-2 (b) 2-4 (c) 4-6 (d) 6-8 (e) 8-10

