Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Geochemistry III**

Determine the age of the following rock samples

What is a metamorphic rock?

What are the differences between sedimentary rocks, igneous rocks and metamorphic rocks?

Determine the age of the sample

Potassium 40 ------🡪 Argon 40 half-life 1.3 billion yrs.

Age = # of Half-lives X Half Life constant

Sample

Parent Daughter Tot Half -Lives Age

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sample 1** | 125 | 875 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Sample 2** | 250 | 3750 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Sample 3** | 1000 | 3000 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Sample 4** | 1500 | 10500 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Sample 5** | 5 | 75 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
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