## Radioactive Dating: Practice (Review for test)

What is radiometric dating (or using radioactive atoms) used for?

How would you describe a radioactive atom?

How would you describe what a half-life is?

What is happening during radioactive decay?

Describe the process of how someone could find the age of a radioactive rock.

How old is a rock that has $3 \%$ of its atom as radioactive and a half-life of 100 years?

Using the graph below, answer questions 1-4.

1. Estimate the half-life for radioactive potassium.
2. If a rock layer has 200 mg of radioactive potassium, how old is it?
3. If another rock layer has 600 mg of radioactive potassium, estimate the age of the rock layer.
4. If a rock layer is 25,000 years old, how many mg of radioactive potassium does it have?

5. Fill in the table below.

| $1 / 2$ life | mg of radioactive <br> californium | time (years) |
| :--- | :--- | :--- |
| 0 | 200 | 0 |
| 1 |  | 5,000 |
|  |  |  |
|  |  |  |
|  |  |  |

