## Half of a life

In this activity, you will simulate radioactive decay and plot the decay of an isotope of the imaginary element pennium.

In this activity, you have 50 pennies. You and your partner should arrange all the pennies so they are "tails" up. You are to flip each of the pennies one at a time. Each penny that turns up "heads" has decayed, while the pennies that are "tails" are still radioactive. Each time, those pennies that have decayed are taken out. Count the number out and record the results as indicated on the chart. Then flip those that are stilled radioactive again. Continue until all the pennies have decayed, or you have completed six rounds of flipping. Plot the results on the graph below.

| Flip <br> Number | Number <br> Decayed | Number <br> Radioactive |
| :---: | :---: | :---: |
| 0 | 0 | 50 |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |



