Decay Spreadsheet Simulation

Task: Create a Google Sheets simulation that demonstrates the result of random decay over time.

Specifics:

- 1. The initial sample should be pure with at least 100 atoms.
- 2. The spreadsheet should determine whether a particular nucleus decays or not.
- 3. We are going to assume the daughter product is stable.
- 4. Produce a line graph (not a best-fit line) that shows the number of atoms of each type at every step of the process.
- 5. Include at least 8 steps of the process.

Possibly Helpful Spreadsheet Notes:

- In order to let the spreadsheet know that you are entering a function, you must start with an equal sign.
- The function *rand()* will return a random number between 0 and 1.
- The function *round(___)* will round a number to the nearest whole number following normal rounding rules.
- If-Then-Else statements are written *if(___, ___, ___)* where the commas are separating the if statement from the then statement and the else statement.
- If you want the statement to return a letter or name, use quotation marks. "B" would enter B in that cell.
- You can embed If-Then-Else statements inside If-Then-Else statements.
- The function *countif(_range_, _value_)* will return the number of times the value is found in the range of cells.

Decay Spreadsheet Simulation

Task: Create a Google Sheets simulation that demonstrates the result of random decay over time.

Specifics:

- 1. The initial sample should be pure with at least 100 atoms.
- 2. The spreadsheet should determine whether a particular nucleus decays or not.
- 3. We are going to assume the daughter product is stable.
- 4. Produce a line graph (not a best-fit line) that shows the number of atoms of each type at every step of the process.
- 5. Include at least 8 steps of the process.

Possibly Helpful Spreadsheet Notes:

- In order to let the spreadsheet know that you are entering a function, you must start with an equal sign.
- The function *rand()* will return a random number between 0 and 1.
- The function *round(___)* will round a number to the nearest whole number following normal rounding rules.
- If you want the statement to return a letter or name, use quotation marks. "B" would enter B in that cell.
- You can embed If-Then-Else statements inside If-Then-Else statements.
- The function *countif(_range_, _value_)* will return the number of times the value is found in the range of cells.