**Investigating models of radioactive decay**

1. Working with a partner open BOTH the [alpha decay](https://phet.colorado.edu/en/simulation/legacy/alpha-decay) and the [beta decay](https://phet.colorado.edu/en/simulation/legacy/alpha-decay) simulations.

Investigate the single atom decays and make a comparison Venn diagram

2. Use the multiple-atom feature and the step feature to collect data on decay of your choice.

|  |  |  |  |
| --- | --- | --- | --- |
| Time | Number of undecayed nuclei | Number of decayed nuclei | Activity |
|  |  |  |  |
|  |  |  |  |

3. Make appropriate graphs to find half life and compare with the accepted result. Is the sample size of 100 atoms sufficient to get a reliable value? Compare the uncertainties in your values with the accepted result and find percentage error.

