# Radioactivity and Nuclear Physics

### Glossary

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| **Concept** | **Definition** |
| Spontaneous Decay |  |
| Isotope |  |
| Half Life |  |
| Decay Constant |  |
| Alpha Decay |  |
| Beta Decay |  |
| Positron Decay |  |
| Gamma Decay |  |
| Electron Capture |  |
|  |  |

### Descriptions

You need to be able to describe to following

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| **Experiment** | **Description** |
| Rutherford Scattering |  |
| High energy e-  diffraction to find nuclear radius |  |
| Single Kinetic energy of Alpha decay |  |
| Range of Kinetic energies of beta decay |  |
| How to determine half life of isotope |  |
| Cloud Chamber (inc. tracks) |  |
| Bubble Chamber (in.c tracks) |  |
| Alpha Energy and Half Life |  |
| Use of radioisotope tracers in medicine |  |
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