

CURRICULUM ALIGNMENT – Radioactive Half-Life: The Whole Story

Northwest Territories

| Grade | Course Name and Number | Unit | Specific Outcome |
|-------|------------------------|------------------------|---|
| 12 | Physics 30 | Unit D: Atomic Physics | Specific Outcome 30–D3.3k: Perform simple, non-logarithmic half-life calculations. |
| 12 | Physics 30 | Unit D: Atomic Physics | Specific Outcome 30–D3.3s: Analyze data and apply mathematical and conceptual models to develop and assess possible solutions, including: <ul style="list-style-type: none">• graph data from radioactive decay and estimate half-life values;• interpret common nuclear decay chains;• graph data from radioactive decay and infer an exponential relationship between measured radioactivity and elapsed time; and• compare the energy released in a nuclear reaction to the energy released in a chemical reaction, on the basis of energy per unit mass of reactants. |
| 12 | Physics 30 | Unit D: Atomic Physics | Specific Outcome 30–D3.4s: Work collaboratively in addressing problems and apply the skills and conventions of science in communicating information and ideas and in assessing results. |