

# CURRICULUM ALIGNMENT – Radioactive Half-Life: The Whole Story

## Alberta

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