CURRICULUM ALIGNMENT – Radioactive Half-Life: The Whole Story

Nunavut

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: • 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.