## **CURRICULUM ALIGNMENT – Flying the Radioactive Skies**

## Saskatchewan

Grade	Course Name and Number	Unit/Module	Specific Outcome
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	Foundational Objective: Recognize that people are constantly being exposed to radiation from natural and human-created sources.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Foundational Objective:</b> Recognize the potential danger of exposure to tissue and genetic material from radiation.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 1:</b> Define the following terms: radioactivity, isotopes, alpha particles, beta particles, gamma rays, dosimetry, absorbed dose, dose equivalent, quality factor.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 5:</b> Recognize that people are constantly being exposed to radiation from a variety of sources.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 6:</b> Recognize that, although exposure to radioactivity is inevitable, it should be minimized.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 10:</b> Compare the penetrating power, speed, potential danger and other important characteristics of alpha particles, beta particles and gamma rays.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 18:</b> Demonstrate an understanding of the units that are used to measure radiation.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 19:</b> Recognize that absorbed radiation has different effects on different kinds of tissue.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 20:</b> Recognize that there is disagreement among scientists on the cumulative effects of low dosage exposure to radiation.
12	Physics 30	Core Unit IV: Nuclear Physics A: Natural Radioactivity	<b>Learning Outcome 21:</b> Understand that no exposure to radioactive emissions, for any period of time, should be regarded as being "safe" to humans or other living organisms.
12	Biology 30	Unit 3 Genetics	<b>Learning Objective 2.6:</b> Describe the causes and effects of both chromosome and gene mutations.