

Name: _____

Date: _____

Chapter 3 Task: Radioactive Isotopes Rubric**BLM 3–12**

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding <ul style="list-style-type: none"> Determines a defining equation Determines the radioactive activity at the indicated times Sketches a graph of the relation 	<ul style="list-style-type: none"> Demonstrates limited understanding of how to find the defining equation in part a) i) Demonstrates limited understanding of how to find the radioactive activity for part a) ii) Demonstrates limited understanding of how to graph the relations found in parts a) iii) and b) 	<ul style="list-style-type: none"> Demonstrates some understanding of how to find the defining equation in part a) i) Demonstrates some understanding of how to find the radioactive activity for part a) ii) Demonstrates some understanding of how to graph the relations found in parts a) iii) and b) 	<ul style="list-style-type: none"> Demonstrates considerable understanding of how to find the defining equation in part a) i) Demonstrates considerable understanding of how to find the radioactive activity for part a) ii) Demonstrates considerable understanding of how to graph the relations found in parts a) iii) and b) 	<ul style="list-style-type: none"> Demonstrates thorough understanding of how to find the defining equation in part a) i) Demonstrates thorough understanding of how to find the radioactive activity for part a) ii) Demonstrates thorough understanding of how to graph the relations found in parts a) iii) and b)
Thinking <ul style="list-style-type: none"> Prepares a plan to solve the problem Carries out the plan 	<ul style="list-style-type: none"> Needs extensive assistance to begin organizing a plan and needs steps to follow 	<ul style="list-style-type: none"> Needs some assistance to organize and implement an effective strategy 	<ul style="list-style-type: none"> Needs minimal assistance to organize and implement an effective strategy 	<ul style="list-style-type: none"> Needs no assistance to organize and implement an effective strategy
Communication <ul style="list-style-type: none"> Clear explanations and justifications Correct use of mathematical language Clearly labelled graphs 	<ul style="list-style-type: none"> Does not clearly explain or justify solution Uses limited mathematical form Uses limited labelling on graphs 	<ul style="list-style-type: none"> Explains or justifies the solution somewhat Uses minimal mathematical form Uses some labelling on graphs 	<ul style="list-style-type: none"> Explains or justifies the solution fully Uses good mathematical form Graphs are well-labelled 	<ul style="list-style-type: none"> Explains, justifies and shows insight into all aspects of the solution Uses excellent mathematical form Graphs are clearly labelled
Application <ul style="list-style-type: none"> Compares the results for effective half-life and half-life in part b) Researches and reports on one of the indicated topics 	<ul style="list-style-type: none"> Is ineffective in comparing the results for effective half-life and half-life in part b) Is ineffective in researching and reporting on one of the indicated topics 	<ul style="list-style-type: none"> Is somewhat effective in comparing the results for effective half-life and half-life in part b) Is somewhat effective in researching and reporting on one of the indicated topics 	<ul style="list-style-type: none"> Compares the results for effective half-life and half-life in part b) with considerable effectiveness Researches and reports on one of the indicated topics with considerable effectiveness 	<ul style="list-style-type: none"> Compares the results for effective half-life and half-life in part b) thoroughly and with a high degree of effectiveness Researches and reports on one of the indicated topics with a high degree of effectiveness

