Name: _____   Date: _____

Chapter 6 Task: Mathematics in Media Studies

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding • Plots a graph of length versus step number • Determines a recursive formula • Determines an explicit formula • Calculates the indicated dimensions	• Demonstrates limited understanding of how to plot a graph of length versus step number • Demonstrates limited understanding of how to determine a recursive formula • Demonstrates limited understanding of how to determine an explicit formula • Demonstrates limited understanding of how to calculate the indicated dimensions	• Demonstrates some understanding of how to plot a graph of length versus step number • Demonstrates some understanding of how to determine a recursive formula • Demonstrates some understanding of how to determine an explicit formula • Demonstrates some understanding of how to calculate the indicated dimensions	• Demonstrates considerable understanding of how to plot a graph of length versus step number • Demonstrates considerable understanding of how to determine a recursive formula • Demonstrates considerable understanding of how to determine an explicit formula • Demonstrates considerable understanding of how to calculate the indicated dimensions	• Demonstrates thorough understanding of how to plot a graph of length versus step number • Demonstrates thorough understanding of how to determine a recursive formula • Demonstrates thorough understanding of how to determine an explicit formula • Demonstrates thorough understanding of how to calculate the indicated dimensions
Thinking • Prepares a plan to solve the problem • Carries out the plan	• Needs extensive assistance to begin organizing a plan and needs some steps to follow	• Needs some assistance to organize and implement an effective strategy	• Needs minimal assistance to organize and implement an effective strategy	• Needs no assistance to organize and implement an effective strategy
Communication • Clear explanations and justifications • Correct use of mathematical language • Clearly labelled graph	• Does not clearly explain or justify solution • Uses limited mathematical form • Uses limited labelling on graph	• Explains or justifies the solution somewhat • Uses minimal mathematical form • Uses some labelling on graph	• Explains or justifies the solution fully • Uses good mathematical form • Graph is well labelled	• Explains, justifies, and shows insight into the complexities of the solution • Uses excellent mathematical form • Graph is fully and clearly labelled
Application • Identifies and justifies whether the relation is linear, quadratic, exponential, or reciprocal • Compares the results as required in part g)	• Is ineffective in identifying and justifying whether the relation is linear, quadratic, exponential, or reciprocal • Is ineffective in comparing the results as required in part g)	• Is somewhat effective in identifying and justifying whether the relation is linear, quadratic, exponential, or reciprocal • Is somewhat effective in comparing the results as required in part g)	• Identifies and justifies whether the relation is linear, quadratic, exponential, or reciprocal with considerable effectiveness • Compares the results as required in part g) with considerable effectiveness	• Identifies and justifies whether the relation is linear, quadratic, exponential, or reciprocal with a high degree of effectiveness • Compares the results as required in part g) with a high degree of effectiveness