Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Pd: \_\_\_\_\_\_

***Ups and Downs* Culminating Activity**

**UEQ: How do the patterns of change determine the types of functions?**

Your Assignment:

Everyone loves instagram. You can share pictures with all of your friends. You are going to “upload” pictures of graphs to your instagram account. Then you will comment on your own picture with the type of graph you “uploaded”. You should use the vocab words and LEQ’s from *Ups and Downs.*  Be sure to describe all of the different types of growth and decay that were covered.

Requirements:

* “upload” pictures that are complete with labels and correct graphs
* Describe the different types of functions – linear, quadratic, exponential growth, exponential decay and periodic
1. Increasing or decreasing
2. How fast? Quick or slow?
* Include a table associated with graphs in comments section
* Include formulas associated with graphs in comments section

***Ups and Downs* Instagram Culminating Activity
Rubric**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Expert | Average | Novice |
| Linear | Clearly show linear graph with associated table. Include a NEXT/CURRENT formula and direct formula.  | Clearly show graph with associated table. No formulas. | Clearly show a graph with incorrect table. No formulas. |
| Quadratic | Clearly show quadratic graph with associated table. Explain why it is a quadratic function. | Clearly show graph with associated table. A vague explanation of why it is quadratic. | Incorrect graph of a quadratic equation or no explanation. |
| Expo Growth/Decay | Clearly show exponential graph with associated table. Explain why it is an expo function. Write next-current formula for expo growth/decay. | Clearly show graph with associated table. A vague explanation of why it is quadratic. | Incorrect graph of an expo function or no explanation. |
| Periodic | Clearly show periodic graph with associated table. Describe the period of the function. | Clearly show graph with associated table. A vague explanation of the period of the function. | Incorrect graph of a periodic function or no explanation. |