

| Opening Checklist (15 points) | Initials |  |
| :--- | ---: | ---: | ---: |
| 1. I had my math notes folder and daily papers ON MY DESK by the time class began. | $/ 5$ |  |
| 2. I had been using a SHARPENED pencil by the time class began. | $/ 5$ |  |
| 3. I had FINISHED copying the objective and had STARTED defining the Word of the <br> Day by the time class began. |  |  |
| Do Now (10 points) - Copy the Objective and define the Word of the Day. |  |  |
| Obj: |  |  |
| Word of |  |  |
| the Day |  |  |
| \& Defn: |  |  |

Skill Review (10 points) - Show ALL work necessary.

Notes (20 points)
Initials

| Completed Notes Page/Activity | $/ 10$ |  |
| :--- | :---: | :---: |
| Earned the Appropriate Number of Teacher Checkmarks | $/ 10$ |  |

## Exit Ticket (10 points) - Complete INDEPENDENTLY and SILENTLY.

a) | $x$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 4 | 7 | 10 | 13 | 16 | 19 | 22 |

b) $\mathrm{x} |$| y | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| y | 6 | 12 | 24 | 48 | 96 | 192 |

c) | x | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| y | 1 | 3 | 7 | 13 | 21 | 31 | 43 |





1) Draw a graph to match the story. Think about when you would draw a line versus a curve. Jamaya is going sky-diving! She gets into an airplane and waits on the pavement for 2 min . Then the plane takes off, climbing steadily to $10,000 \mathrm{ft}$ over the next 10 min . After 1 min of waiting at $10,000 \mathrm{ft}$, Jamaya jumps from the plane and free falls for 2 min . Deploying her parachute at $2,000 \mathrm{ft}$, she slowly glides back to Earth over the next 6 min where she lands gently on the ground.

2) Radioactive elements experience exponential decay. Every half-life, the amount of the element is cut in half. The half-life of Magnesium-27 is approximately 10 min . If a scientist starts with 1000 grams of Mg-27, how long is it until the scientist has fewer than 50 grams left? Make a table and a graph.

| Time (min) | Mg-27 (g) |
| :--- | :--- |
|  |  |
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|  |  |



Is the rate of decay faster at the beginning of the scientist's experiment or towards the end? How do you know?

