**Water loss in Floorlandia: Hydrograph**

**Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Class: \_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Complete this table for the Rural Watershed:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # steps from discharge point | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| List the water droplets |  |  |  |  |  |  |  |  |  |  |
| # of total water droplets | *0* |  |  |  |  |  |  |  |  |  |

1. Complete this table for the Urban Watershed:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| # steps from discharge point | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| List the water droplets |  |  |  |  |  |  |  |  |  |  |
| # of total water droplets | *0* |  |  |  |  |  |  |  |  |  |

1. Use the image on the next page to create a graph of the data, labeling your axes. Time is represented on the x-axis (and is the same as the number of steps away from the discharge point) and the total amount of water on the y-axis (same as the number of droplets). These graphs are called a **hydrograph**.
2. 🌢 What does your graph tell you about how the model simulates the runoff of water from the rainstorm out of the watershed? How do you explain the shape of the graph?