**Winter Nights Task**

Ottawa’s **temperature starts at 5° C** and the temperature **drops 3°C per hour**.

Toronto’s **temperature starts at -5° C** and the temperature **rises constantly each hour**.

Montreal’s **temperature** is described by the formula **T = 9 – 5h**



|  |
| --- |
| OTTAWA |
| Time from Start | Temperature |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

|  |
| --- |
| TORONTO |
| Time from Start | Temperature |
| 0 | -5 |
| 1 |  |
| 2 |  |
| 3 | 2 |
| 4 | 4 |
| 5 |  |

|  |
| --- |
| MONTREAL |
| Time from start | Temperature |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

**1. Represent** the 3 cities temperatures in different ways on a poster:

* tables,

Math Vocabulary:

Increasing/Decreasing/Linear/

Non-Linear/Constant/

First Differences/Initial Value/

Rate of Change/Steepness

* graphs,
* words,
* equations,
* other…

**2. Create** one more city where the temperature changes **constantly**. **Represent** the city’s temperature in as many ways as possible.

|  |  |
| --- | --- |
| Time from start | Temperature |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

|  |
| --- |
| MONTREAL |
| Time from start | Temperature |

3. Determine when the temperatures are the **same** for the cities?