**How to Graph: The Basics and Example Point Graph**

**Overview:**

Graphs are often used to help display data in an organized manner that is easy to read, interpret, and analyze. Basically, **GRAPHS MAKE OUR LIVES EASIER**.

**The Basic Components:**

1. **Title**: tells what the graph shows
2. **X-axis Label**: tells what the x-axis values represent
3. **Y-axis Label**: tells what the y-axis values represent
4. **X-axis Values**: quantity of what is measured on x-axis
5. **Y-axis Values**: quantity of what is measured on y-axis
6. Types of Graphs:
   1. Bar graph: compares quantities that are not related
   2. Point-Line graph: plots quantities that are related🡪 THIS IS WHAT WE WILL USE **MOST** OF THE TIME
7. Tips to remember:

* Always have **equal increments** on your axis
* Always **THINK** about what you are graphing (this seems silly, but it helps!)

**Example: Plant Growth over 8 days**

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| --- | --- | --- | --- | --- | --- |
| **Day** | **0** | **2** | **4** | **6** | **8** |
| **Height of plant (cm)** | **0** | **1** | **2** | **3** | **4** |

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**Example: Snow Fall in Vail, CO, over 5 days**

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| **Day** | **1** | **2** | **3** | **4** | **5** |
| **Snow Fall (in)** | **5** | **7** | **8** | **5** | **7** |

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**Example: Speed of a car on the way to school**

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| **Time (sec)** | **0** | **5** | **10** | **15** | **20** |
| **Speed (m/s)** | **0** | **10** | **20** | **30** | **40** |

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