

**Collect Data**

Data is usually

**quantitative**

**Quantitative: quantity**

#, measure

**Qualitative: quality**

Observations

Features/characteristics

Data table set up:

Title: **Effect of MU on RV**

**MU** on the **left**  
**RV** on the **right**

including:

- 3 trials
- **Average**

Title:

Color light	Mass of Pumpkin			Avg
	Pum 1	2	3	
Control				
Man. 1				
2				
3				

**Analyze Data**

Recognize Trends

- ↗ Increasing
- ↘ Decreasing
- ↔ Both

and find

**Patterns**

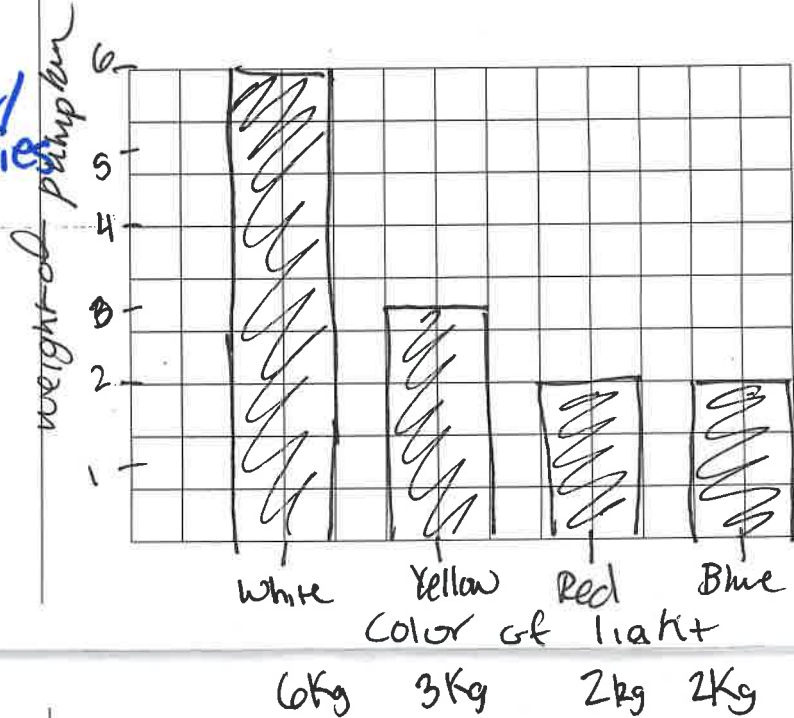
**Rules!**

- Title, same as Data table

Two types of graph:

When to use a **Bar**  
**Compare discrete/ Separate categories**

What data does it visually display?



• Axis labels (w/units)

• Consistent intervals

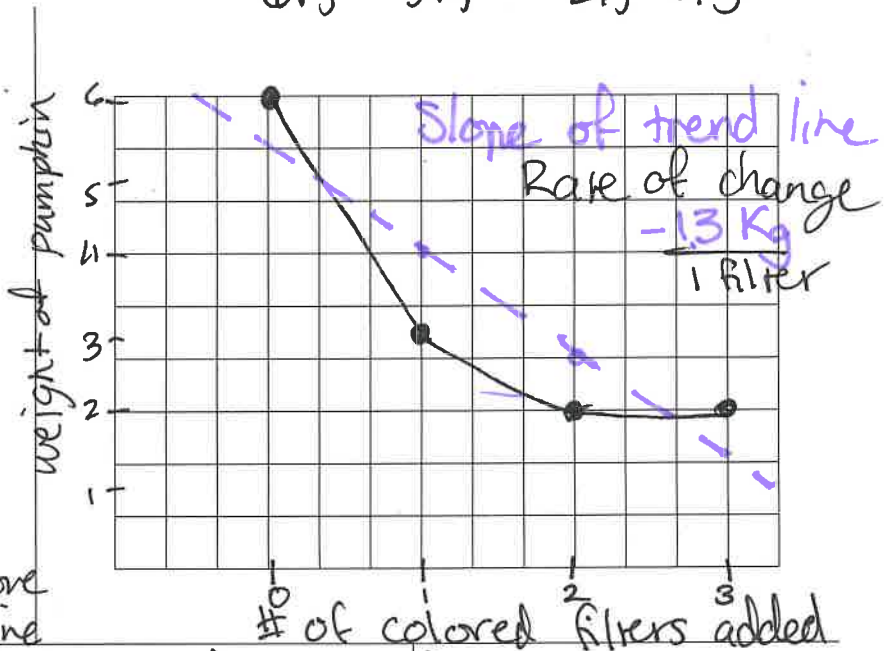
- can't us  $\pi$  between data points

• Appropriate Scale

- Use your space!

When to use a **Line**  
**Show trends in continuous data**

What data does it visually display?



Scale: Determines the story you graph tells. How others see the trend

**Best Fit Line:** Trend Line  
- shows general trend of data  
- same # points above & below trend line

**Draw Conclusions**

Make \_\_\_\_\_  
\_\_\_\_\_ and draw \_\_\_\_\_ based on them.

**Claim:** Answer to investigative question

**Evidence:** low control group lowest recorded RV | High Highest manipulation of the experimental highest recorded Responding Var.

**Reasoning:**  
• COMPARE the 2 data points, say why it supports the claim  
• Scientific Reason

specific!