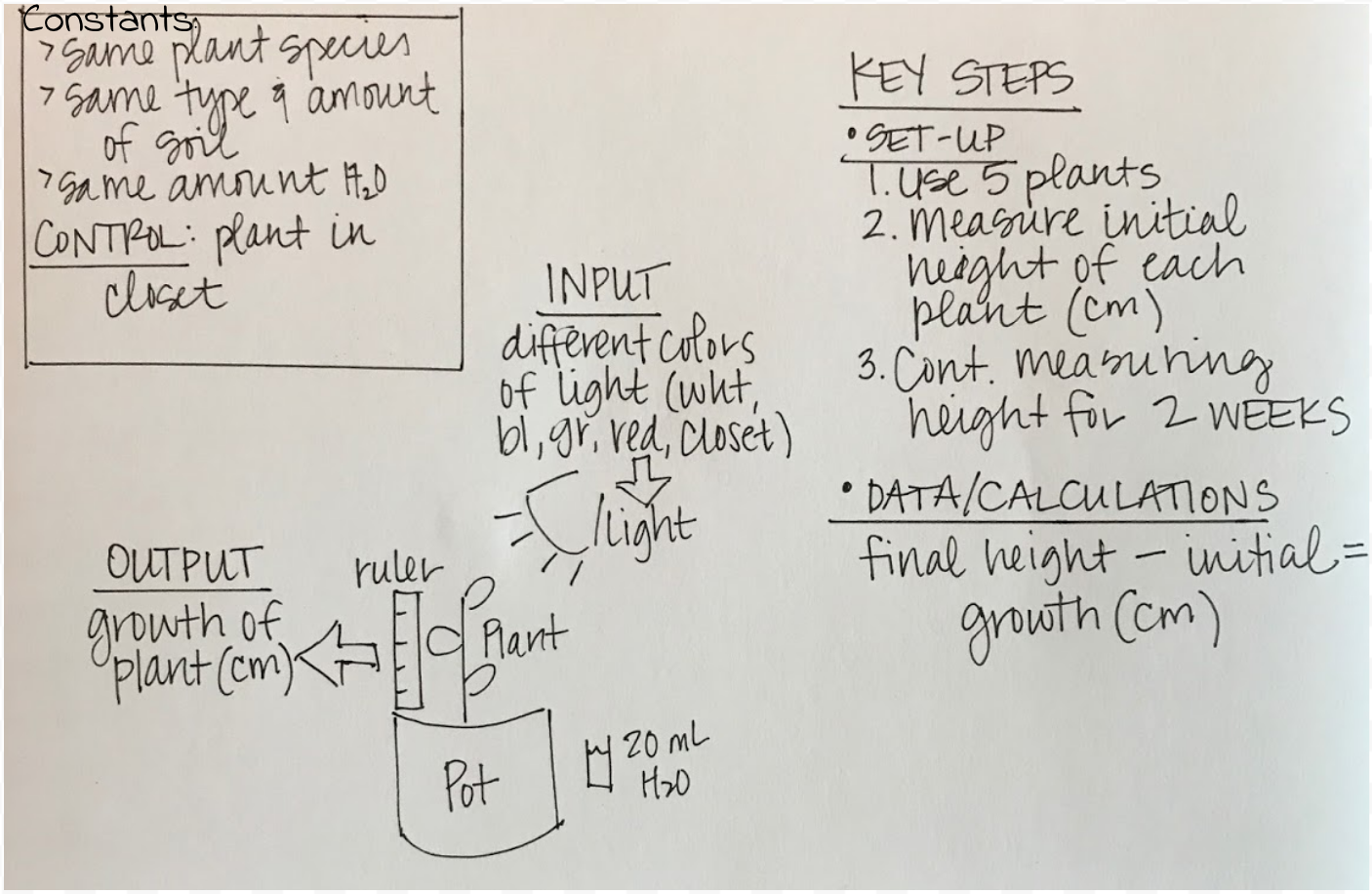
**Flowchart Set-Up *(Replaces “Procedures” in Lab Write-Up)***

A **QUALITY** flowchart has 5 elements:

1. **Experimental Set-up Diagram** - A *labeled* diagram of your experiment.  It includes all materials in their final assembled state.
2. **Input Arrow (“i”ndependent variable)** - Identifies the thing *“i” change* in the experiment (if appropriate).
3. **Output Arrow (“d”ependent variable**) - Identifies the *“data” gathered/measured* with units (if appropriate).
4. **Constants/Control Box** - Identifies the things that should *remain the same* for each member of the experimental group. Identify control group (if appropriate). ***UPPER LEFT CORNER***
5. **“Key Steps” Summary of procedure (bullet points)** - A *simplified* explanation of how to *set up* your experiment, and all *calculations* to be used in your analysis of data. ***RIGHT SIDE OF DIAGRAM***

**Example:** Britney wants to know how **different colors of light** affect the **growth of plants**.  She believes that plants can survive the best in white light.  She buys 5 plants of the **same species**. She places **one in white light, one in blue light, one in green light, one in red light** and **one in the closet (control)**.  She **measures their initial height** on Day 1.  All of the ferns are planted in **500 mL** **potting soil with Miracle-Grow** and given **20 mL of water once a day** for 2 weeks.  After the two weeks, Britney **measures their final height in centimeters**.

***(strong suggestion: start with a rough draft of your flowchart, refine, then add to lab notebook)***



**Safety Considerations: careful with hot light bulbs**