**Mathematics Rich Assessment Task: Collecting & Presenting Data**

**Today you must work by yourself to...**

1. **Create a series of questions (e.g. a questionnaire) for a real life data investigation. Your investigation must either:**
   * **prove,**
   * **disprove, or**
   * **identify something that needs to be improved.**

**Your questions must collect both data types:**

1. **Categorical**
2. **Numerical.**
3. **Collect the data by observation or survey, using an appropriate table and correctly used tally marks.**
4. **Present the data using:**
   1. **A pictograph**
   2. **A bar graph**
   3. **A column graph**
   4. **A pictograph where one picture represents many**
   5. **A dot plot.**
   6. **A side-by-side column graph.**
   7. **Stem and leaf plots (if possible)**
   8. **The most efficient graph possible (sorted or grouped) and explain why this is the most efficient graph.**
   9. **A graph using Microsoft Excel or Numbers (iPad).**
5. **Write a concluding paragraph that explains how you investigation has:**

* **proved,**
  + **disproved, or**
  + **identified something that needs to be improved**

**and list the steps that you or others could take in the future as a result of this investigation.**