1. **POGGING OR STATING A QUESTION**

   What do you want to find out? *Write the problem in the form of a question.*
   - Begin by listing several questions on a topic
   - Try to eliminate questions that cannot be answered by gathering evidence such as yes or no questions
   - Break broad questions into questions that can be investigated one at a time
   - Word questions in a way that allows them to be answered by an investigation or experiment

2. **DEVELOP A HYPOTHESIS**

   A hypothesis is what you think the answer is to the question – an educated guess or *inference*
   - Tell **HOW** you think your project can demonstrate your purpose
   - Make sure your hypothesis can be tested
   - Try to word the hypothesis as an *If … then …* statement

3. **IDENTIFY THE VARIABLES**

4. **LIST THE MATERIALS**

   - Identify and collect ALL of the materials you will need to answer your question or test your hypothesis

5. **STATE THE PROCEDURE**

   - Give a detailed explanation of how the experiment will be performed to test your hypothesis.
   - Be very specific about how you will measure results to prove or disprove your hypothesis. You may want to develop a regular timetable for measuring results or making observations (i.e. every hour, every day, every week).

6. **RECORD THE OBSERVATIONS/DATA/RESULTS**

   - Keep track of your results and record all of your observations (logbook).
   - Photograph your project results or phases of the project if appropriate to help your analysis and possibly to demonstrate your experiment on your exhibit board.
   - *Data should be graphed or expressed in an easy to read format.*

7. **DRAW CONCLUSIONS**

   Compare the interpretation of your data with your hypothesis to see if you were right or wrong. This is one of the most important sections and is often the first one someone reads. *Therefore, it should summarize the whole experiment:*
   - State the problem
   - State the hypothesis
   - Was the hypothesis supported?
   - Answer the problem (therefore, we know that….)