**CHE1031 Lab HW set 1:**

**The scientific method, experimental and computational methods**

*Read pages 6 – 12 of your lab manual and answer these questions as you do so.*

*Type your answers into this Word document or answer on green engineering graph paper.*

1. What makes for a good hypothesis?
2. Why is it impossible to prove a hypothesis correct?
3. What is the essential difference between data and results?
4. What is another name of the ‘SI system’ of units?
5. How many micrometers (μm) are in one meter?
6. What does the term least count mean?
7. What is the digit of uncertainty in the number 10.0728?
8. What two pieces of glassware should not be used to measure volume accurately?
9. What is a meniscus and how is it used in measuring liquids?
10. If you are trying to shoot a bulls-eye but all three of your shots it the same spot in an outer ring of the target, have you been precise or accurate?
11. Is percent error a measure of precision or accuracy?
12. Is percent difference a measure o precision or accuracy?
13. What does standard deviation say about a set of data?
14. Which type of zero is never significant?
15. What limits the number of significant digits in data and results?