**Strategies for Scientific Writing**

Never use personal pronouns (I, You, We, etc.) In writing a formal lab report

Do not include your feelings, attitudes, impressions or opinions.

Use the imperative voice throughout your procedure (State the instructions as commands!)

Try to fix these examples:

INCORRECT: I dissolved 8.5g of sodium chloride in 100ml of water.

CORRECT:

INCORRECT: We heated the solution to 100 degree Celsius for 25 minutes.

CORRECT:

INCORRECT: I discovered that the greatest color change was…

CORRECT:

Provide citations for all work that you consulted in writing your lab report or other informative writing.

Run a spellcheck and proofread carefully. Read the paper out loud and/or have a friend look over it for misspelled words, missing words etc. **This is especially true because spell check doesn’t catch a lot of scientific terms and words.**

**Strategies for Creating Scientific Tables and Graphs**

Graphs and tables are used to visually communicate data so that a reader can quickly form a conclusion.

There are many websites that help build graphs for you automatically, such as Create-A-Graph:

Create-A-Graph: <http://www.nces.ed.gov/nceskids/createagraph/>

All Tables include:

* Comprehensive title
* Labels for columns and rows (including the units for the measurement)

All Graphs include:

* Comprehensive title
* Labeled x and y axes (including units for the measurement)
  + X axis = independent variable
  + Y axis = dependent variable
* Numbering starts at zero. Equal spacing is used to represent the same amount between intervals
* Key/Legend when necessary

**Strategies for Reading Material in the Science Classroom**

You have to read something several times before you understand and remember it.

**PLAN Before Reading…**

* Ask yourself what you already know about the topic. Think of related topics you’ve learned in the past.
* Know your purpose. “Why and I reading this?” Hint: When textbook readings are assigned, their purpose is most often to help you better understand a particular scientific concept.
* Skim first from start to finish. Focus on headings, pictures, graphs, tables and key paragraphs. Hint: key paragraphs usually are found at the beginning and end of a reading section.
* Make a list of unfamiliar words.

**DO While Reading…**

* Annotate the text by reading with a pen. This means take notes, write definitions for unfamiliar terms, fill in templates possibly given to you, etc. Hint: Don’t go overboard in highlighting or underlining!
* Rehearse as you go along. Take breaks and test yourself to see what you remember reading.
* Work within your attention span. Hint: Most people can only read challenging text for about 10-15 minutes at a time before zoning out.

**REVIEW After Reading…**

* Rehearse what you have read soon after you have finished reading.
* Consolidate information. Hint: That means narrow down information \ if you took repetitive or excessive notes.
* Answer questions.
* Test yourself

**A Second Reading???**

Only read the material again to understand it. If you are comfortable with what you understand, proceed to other tasks like solving problems, answering questions, etc.

In this second reading, if you find you are still having difficulty try this:

* Look for additional resources on the topic on the teacher’s website, edline, or on the Web
* Ask you teacher for help (by email, in class, after school, etc)

Resources used in making this guide include:

“Annotating Textbooks.” Niagra University. 2012. http://www.niagara.edu/assets/Uploads/Annotating-Textbooks.pdf (August 29, 2012)

Landsberger, Joseph. “Reading Assignments in Science.” Study Guide and Strategies. <http://www.studygs.net/sceince.readingtexts.htm> (August 29, 2012)

“PIRR: Preview, Read, Recall.” Sanger Learning Center. 2009-2012. The University of Texas at Austin. <http://www.utexas.edu/ugs/slc/study/prr> (August 29, 2012)