Some Scientific Writing Conventions

Avoid in scientific writing

- **Active voice**
  - Incorrect: “I weighed the compound . . .”
  - Correct: “The compound was weighed . . .”

- **Personal pronouns** (I, me, my, mine, we, us, our, ours)

- **Present tense (use past tense instead)**
  - Incorrect: “The compound changes color with the addition of . . .”
  - Correct: “The compound changed color with the addition of . . .”

- **Vague language**
  - Incorrect: “The temperature changed when . . .”
  - Correct: “The temperature increased to 47 °Celsius when . . .”

**Passive vs. Active Voice**

- When using active voice, the subject (noun) of the sentence performs the action (verb).
  - *I heated the solution to 80 °Celsius.*
  - In this example, the subject (I) performed the action of the sentence (heated).

- When using passive voice, the subject (noun) receives the action (verb).
  - *The solution was heated to 80 °Celsius.*
  - In this example, the action (was heated) is acted upon the subject [“-by me” (not worded)].

**Titles**

- Use descriptive titles to title lab reports.
  - Not specific and descriptive enough: *Cell Division*
  - Better: *Mitosis in Eukaryotic Cells*

- Be descriptive when titling tables and figures.
  - Vague and not descriptive: *Position of Earth*
  - Better: *Position of Earth relative to...*
Citing sources to avoid plagiarism

- When citing sources, the Council of Science Editors Style (CSE) is most commonly used (see the Write Place’s CSE handout).

- To avoid plagiarism, give credit to any outside source used. This means that any information that did not originally come from the writer (you) must be cited in the text, as well as on a reference page.

- Paraphrasing: including information from outside sources without directly quoting from that source.

- Source citation is still necessary when paraphrasing, even though the words have been changed from the original quote.

Editing

Some questions to keep in mind when self editing and peer editing:

- Who is the audience?
- What does the audience want to know?
- How much does the audience know?
- What expectations does the reader have of the writer?
- Are all questions answered thoroughly and with enough detailed support?
- Is all information presented honestly, clearly, and concisely?
- Are there any misspelled words?
- Is there incorrect word use?
- Is all “borrowed” information or information from outside sources cited in text and also on the reference page?