Use Statements, Not Commands

In English, we use four types of sentences.

- We make statements:
  "A basketball was used as the object in motion."
- We give commands:
  "Give a gentle push to roll it steadily in a straight line."
- We ask questions:
  "What are the kinematics of objects moving with uniform velocity or acceleration?"
- We make exclamations:
  "Watch out so the ball does not hit any obstructions!"

Using Statements: Example

Do not write your report as though you were giving directions:

"Cool the solution to 22 degrees C."

Instead, write your methods using statements:

"The solution was cooled to 22 degrees C."

Lab report writing requires the use of statements.

You should not use other sentence types in your lab report. This rule is especially important when you write your methods section of your report.

You want to make sure that you use, not commands, but statements.

Choose The Correct Verb Tense

In English, tense refers to how a verb indicates time. For instance, we often distinguish between past and present tense, and we use different additions to verbs to explain other periods of time, such as when an event occurs both in the past and the present, or when an event occurs in the future.

Using verb tenses in lab reports can be difficult because one tense may not be suitable across the entire report.

The tips in the box the right will help you choose which verb tense you need:

Using Verb Tense in Lab Reports

Use past tense for actions that already occurred (e.g., your methods during the experiment, the results you obtained)

Example:
"The sample was placed in the incubator."

Use present tense for ideas and descriptions that still hold true (e.g., your purpose, descriptions of equipment, scientific theories)

Example:
"Ammonia and hydrochloric acid react to produce ammonium chloride gas"

Use expressions of possibility and conditions for claims that are not definite (e.g., suggestions for changes in the lab; recommendations for the future)

Example 1:
"Using a ceramic crucible would have reduced heat loss."

Example 2:
"Using a ceramic crucible could reduce heat loss."

Use Active or Passive Voice Carefully

In English, we have two voices: **passive** and **active**.

Traditionally, scientists relied on passive voice in order to maintain a sense of objectivity in their writing. Because these rules about objectivity and language are changing, scientists no longer agree whether writers should rely solely on the passive voice.

Some prefer active voice because it is more straightforward and clear; however, others argue that using passive voice is still best for keeping an objective tone, which is so important in science.

Check with your instructor to find out what she or he prefers.

Using Passive or Active Voice

The key difference between active and passive voice is the grammatical subject's role in the sentence.

Active voice refers to a sentence in which the grammatical subject is **the doer of the action**:

Example:

We cooled the solution to 22°C.

Here, the subject, "we," performs the action, cooling.

Passive voice refers to a sentence in which the grammatical subject is the receiver of the action:

Example:

The solution was cooled to 22°C.

Here, the subject, "solution," doesn't do the cooling. Rather, the solution is what is cooled (it's the receiver of the action).

Choose First, Second and Third Person Judiciously

Person is used to describe point of view in writing. In English we have three different persons:

- **First** (I/we),
- **Second** (you), and
- **Third** (he, she/they).

Because a common goal of science is to project a sense of objectivity, in the past, most scientists have used the third person. Some scientists argue that the use of "I" or "we" might suggest that an experiment is unable to be replicated unless the original researchers are present.

However, in recent years, more scientists have been using the first person in scientific writing, especially in the social sciences. Writers and readers often find that using the first person is more direct and clear. However, plenty of scientists still prefer use of the third person. Since scientists don't agree on this issue, it's best to **check with your instructor about what he or she prefers**.