

## For example...

### Automotive Repair Orders

These reports detail the necessary information for automotive repair. The auto industry refers to these main headings as “The 3 C’s”. Each individual **concern** is listed as a separate line item on the repair order. Under each line item, the technician must detail the **cause** and **correction**, including any tests performed, the results of those tests, and analysis of the results.

**CONCERN:** Customer states that a growling sound can be heard when driving at speeds above 40 mph. The faster the car goes above that speed, the louder the growling sound. The sound also seems worse early in the day when temperatures are lower.

**CAUSE:** Test drove vehicle under the conditions described by the customer and a distinct “growl” was noticed coming from the left rear wheel.

Vehicle was secured on a lift and the transmission was shifted into drive to allow the wheels to turn freely while the car was in the air. Using a stethoscope, a faint growl was heard coming from the left rear knuckle at the wheel was spinning. Recommend replacement of left rear wheel bearing assembly.

**CORRECTION:** Replaced left rear wheel bearing and test drove vehicle. All irregular noises are gone. Advise customer that the right rear wheel bearing seems to functioning normally at this time, but it may require replacement sometime in the near future.

Writing is similar to many other skills—becoming a stronger writer takes practice, practice, practice!

### Scientific Lab Reports

These reports detail the process of a laboratory experiment, and share the results of that experiment. Many scientific lab reports use the following section headings. *Ask your instructor if you should use the ACTIVE VOICE (“I gathered the results”) or the PASSIVE VOICE (“the results were gathered”).*

**TITLE:** Be factual and direct, not “creative” or “original”.

**ABSTRACT:** Give a concise summary (100-200 words) of the purpose of the report, the data presented, and the major conclusions.

**INTRODUCTION:** Clarify the subject, outline the scientific purposes or objectives, and give the reader enough background to understand the rest of the report.

**MATERIALS AND METHODS:** Describe the tools, and explain the methods used in the experiment. Provide enough detail that the experiment could be replicated by another individual. Use the past tense.

**RESULTS:** Clearly summarize the data, but do not discuss implications or conclusions. Organize data into tables or figures, which are numbered and titled for easy reference. Always **introduce** a figure or table with written explanation, and provide a legend explaining any symbols, abbreviations, or other information.

**DISCUSSION:** Offer a critical interpretation of the data, relating the results to existing theory and knowledge. Explain the logic that allows you to accept or reject your original hypothesis. Suggest future experiments that may clarify areas of doubt.

**REFERENCES:** List all the articles or books cited in your report. Organize alphabetically by author’s last name. Do not use footnotes within the report; refer to sources by author’s name and the article’s date of publication. Use only peer-reviewed sources.



## Technical Writing

**Writing clearly and effectively for business, industry, math, and science courses**





# What is Technical Writing?

## Technical Writing

Technical writing is a necessity in our modern world. Tech writing is used to clarify technical subjects, such as directions, regulations, or processes.



**YOUR MISSION: Help people understand complex material!**

- Identify your writing goal and stay focused. Do not address the reader directly (“you may have wondered”); concentrate on the information.
- Directions and explanations must be clear and direct. Avoid wordiness.
- Be sure your reader can use the information safely, effectively, and efficiently.
- Engage the reader with strong organization, clear word choice and phrasing, and visual aids.
- Explain acronyms, abbreviations, and jargon. Avoid contractions (“do not” rather than “don’t”). Avoid using “it” and other unclear references.

**Remember the Three C’s of Technical Writing:  
Keep it...**

**Clear \* Concise \* Complete**

## Tech Writing is Effective Writing

### 1 First Things First

Other forms of academic or creative writing sometimes suggest a creative lead-in, but technical writing requires you to get straight to the point—put your purpose first.

### 2 Know Your Reader

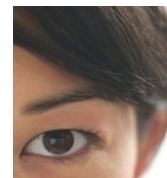
Consider your audience and their needs. Think about who will read your document. What prior knowledge do they have about the topic? Design the document with your audience in mind.

### 3 Order is important

Think carefully about a logical way to organize your information. A clear sequence means your reader can follow the directions easily. Once you’ve determined the best order, Break up the writing into chunks or sections. Headings and subheadings will help your reader grasp the main concepts. Lists (like this one) can also be helpful.

### 4 Provide Visual Assistance

Visual aids assist and engage your reader. An idea that takes many words to explain might be easily transmitted with an illustration (graph, picture, chart). White space will help your reader take a mental break to digest the information.



## Creating Structure

Technical writing is used in office memos and e-mails, resumes, textbooks, cookbooks, user manuals, handbooks, powerpoint presentations, brochures and flyers, business letters and proposals, scientific research and lab reports, and many other documents. A logical structure is often the MOST important aspect of technical writing. Consider the following headings in these common documents:

RECIPE: Title, Ingredients, Directions

MEMO: Date, To, From, Regarding

TEXTBOOK: Table of Contents, Part, Chapter, Section, Subsection, Glossary, Index

RESUME: Contact information, Objective, Education, Experience, Honors & Awards

## Where can I go for help?

1. Look again at your assignment sheet for clarification.
2. Ask your instructor; he or she will be scoring your work, so ask what’s expected.
3. Visit the WWCC Peer Tutor Center in room 2006, open M-F from 8-3. Call the PTC at 382-1707.
4. Submit your work to Smarthinking.com through the tab at the top of your Mustang Cruiser account.