**Technical Description**

The biggest hurdle you may face in writing a description is remembering what the term means as it is used in this context. We all use the word *description* loosely to refer to practically any discussion or explanation. But in this context, it means *the detailed discussion of the physical aspects of a thing*. That means discussing things like color, shape, size, weight, height, width, thickness, texture, density, contents, materials of construction, and so on. It also means discussing any quantifiable details such as numbers.

For example, the sentence "A computer diskette is a device used for storing electronic data" is not really description in our sense of the word. It explains the function or purpose but provides little or no physical detail. However, the sentence "The common computer diskette is 3.5 inches by 3.5 inches and approximately 1/8 inch thick" is very definitely description.

Be sure to check out the example descriptions available with this chapter:

* [Rayovac Workhorse Flashlight](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/descx1.html)
* [Interplak Home Plaque Removal Instrument](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/descx2.html)
* [Primitive Stone Scraper](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/descx3.html)
* [Standard Automobile Alternator](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/descx4.html)

**Contexts for Description**

As mentioned earlier, descriptions are common element in technical writing--just not quite in the same way that instructions are. Descriptions appear more often as a sentence or two here, a paragraph there, or a whole section there. There are certain kinds of technical writing that feature description. You can imagine accident reports requiring plenty of description. Product specifications--documents that describe design and feature of a new or changed product--have plenty of description. Also instructions typically require description as an important supplement: readers need to be able to visualize what they are doing and what they are working with.

**Contents and Organization of Descriptions**

The following is a review of the sections you'll commonly find in descriptions. Don't assume that each one of them has to be in the actual description you write, nor that they have to be in the order they are presented here.

As you read the following on common sections in descriptions, check out the example descriptions. Not all of the following sections typically found in descriptions will show up in the examples, but most will.

**Introduction.** Plan the introduction to your description carefully. Make sure it does all of the following things (but not necessarily in this order) that apply to your particular description:

* Indicate the specific object about to be described.
* Indicate what the audience needs in terms of knowledge and background to understand the description.
* Give a general description of the object and its function, cause, or effect.
* Give an overview of the contents of the description.

Now remember: you may not need all of the elements, and some of them can combine neatly into single sentences. The introduction ought to be brisk and to the point and not feel as though it is trudging laboriously through each of these elements.

**Background.** If the thing you are describing is not likely to be familiar to most of your readers, consider adding some background before you plunge into the actual description. If you are about to describe an SGO/3 density gauge to nonspecialists, you'd better first discuss what in the world the thing is, what it does, and on what part of the planet it is used.

**Discussion of the parts or characteristics.** The main part of your description is the discussion of each part or characteristic. You must divide the thing you are describing into parts, or characteristics, or both. *Parts* are easy: for example, a wooden pencil has lead, a wooden barrel, an eraser, and a metal clip. *Characteristics* are describable aspects of a thing but are not parts: for example, the pencil has a certain weight, lenngth, width, and so on. If you were a budding real-estate tycoon and had to describe a vacant lot for company files, you'd probably describe it by its characteristics: its location, square footage, terrain, vegetation, access to utilities, and so on. (Check out the description of the primitive stone scraper in the examples of description at the end of this appendix; part of it is arranged by characteristics, and part by parts!)

Once you've divided the thing you are describing into parts, characteristics, or both, your next job is to describe each one. For mechanical things, it works well to start by defining the part, by explaining its function. After that, you describe the part from general to specific, using any of the sources of description that are appropriate.

Notice that in description, you can mix other kinds of writing. You'll find yourself explaining functions, defining terms, discussing a bit of process as you describe. That's not a problem as long as the primary focus and the majority of the content is truly description.

**Discussion of the related operation or process.** At some point in a description, often at the end, it is useful to summarize the operation or process associated with the object you're describing. For example, if you've just described a mechanical pencil, you could briefly explain how it is used. If you've just described a snowflake, you could discuss the process by which it formed.

**Sources of Description**

When you write a description, you need to think about the kinds of descriptive detail you can provide. Sometimes, descriptions are rather weak in this area. Use the following list to plan your description or to review a description you have written. Think of the categories of descriptive detail you could provide, or use the following list to identify categories you have not used:

 color height width

 shape weight materials

 texture width location

 methods of attachment depth amount

 pattern, design ingredients age

 subparts length finish

 temperature moisture content smell

[Figure 10](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/apgfg10.gif). Schematic view of descriptions. Remember that this is just a typical or common model for the contents and organization--many others are possible.

**Miscellaneous Concerns**

In descriptions, you'll probably find yourself puzzling over how to handle numbers, abbreviations, and symbols:

**Numbers.** Remember that technical writing breaks some of those rules you worked so hard to learn in past writing classes. In the technical writing context, we are often vitally concerned about numbers and want them to stand out. This means that you should use numerals in running text when the number indicates an exact, measured, or measurable amount or when it represents a critical value. For example, in the sentence "The cup is 3 inches in diameter" or in the sentence "Use 4 tacks to fasten the poster to the wall," it seems to matter that the numbers are exact. However, this does not mean using numerals for indifferent values: for example, in the sentence "The report contains four major sections," there is nothing heart-stopping about how many sections the report has. See the section on [numbers vs. words](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/gram2.html#num) for further details.

[Figure 11](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/apgfg11.gif). Anatomy of a descriptive paragraph. Typically, it starts with some statement about the purpose or function of the part, with the descriptive detail following. Descriptive detail draws upon the "sources" of description--such things as color, shape, width, and height.

**Abbreviations.** In technical writing, we expect to see abbreviations. Use them in your description freely. Remember the rule on punctuating abbreviations--punctuate them only if they spell a word (for example, "in."). Remember too that abbreviations do *not* go up against the number they are used with (for example, make that "8 mm tape" or "8-mm tape" but*not* "8mm tape").

**Symbols.** The most common problem with symbols in the instructions and descriptions assignment has to do with inches and feet. If you're writing instructions for a carpenter's dream project where there are feet and inches all over the place, use the symbols " (inches) and ' (feet). However, if you cite inch and foot measurements only a few times, use the word or abbreviation instead.

**Graphics and Format in Descriptions**

In most descriptions, you'll need at least one illustration of the thing you are describing, with labels pointing to the parts. See the section on [graphics](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/graphics.html) for more on creating graphics, formatting them according to our class requirements, and incorporating them into your descriptions.

**Headings.** In descriptions, you'll want to use headings and subheadings to mark off the discussion of the individual parts or characteristics. Remember that, ideally, you want to describe each part in a separate paragraph or section--and flag that discussion with a heading. If you have a background section, use a heading for it too. See the section on [headings](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/headings.html)for the specific requirements (remember that this course asks you to use a certain style and format for headings).

**Lists.** Lists are not nearly so important in descriptions as they are in instructions. However, if you itemize parts or subparts or list specifications, these are good situations for lists. See the section on [lists](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/lists.html) for the specific requirements (remember that this course asks you to use a certain style and format for lists).

**Special notices.** In descriptions, there is nothing like the important role for special notices as there is in instructions. After all, if it really is a description, readers should not be trying to follow any procedure, and therefore should not be running any risks of damaging equipment, wasting supplies, screwing up the procedure, or injuring themselves or others. However, you may find the *note* special notice to be useful to emphasize important points or exceptions. See the section on [special notices](https://www.tu-chemnitz.de/phil/english/sections/linguist/independent/kursmaterialien/TechComm/acchtml/notices.html) for complete discussion of the proper use of these special notices as well as their format and placement within instructions. (And remember that in our course we have a specific style and format for these notices.)

Our next assignment asks you to explain to both a non-technical or novice audience and a specialized audience “how something works.” The purpose of description is not simply to help your audiences understand what something is or does (which is the province of definition), but to help them see--literally-- how something functions. To this end, descriptions use visual detail, both in pictures and in words, to describe both the physical object or process and how it works.

For this assignment, you will choose an object or a process with which you are reasonably familiar and describe it to the audiences. If you are choosing a process, the process must be one that is not accomplished through direct human action (that would be instructions). In other words, you can describe how blood circulates; you cannot describe how to make a free throw. You may choose something from your chosen major/profession, or you may choose something from a hobby or interest. Examples might be a camera, a hard drive, the human heart, the metabolic process, or a television.

The approximate total length for this assignment is 1000 – 1600 words. As always, please cite your sources. Since there are two descriptions of the same process it will be up to you to decide which audience to write for first. However, please do indicate at the top of each paper which audience is which. The specialized audience could be people who share with you a very specific area of specialization within a field, or it could be a broader audience within that field. The non-technical audience has little to no background knowledge of your subject

 Your descriptions should answer the following questions:

1. What is it?

2. What does it do?

3. What does it look like?

4. What is it made of (physical objects only)?

5. How does it work?

6. How has it been put together?

7. Why should your reader use it?

You will not necessarily answer these questions in an orderly manner, but each of them should be addressed if they are relevant to your description.

Your descriptions should have the following elements:

• Sense of the overall object or process, including why it is significant for the audience

• Clear explanation of each part's function

• Details appropriate to the audience's interest and level of knowledge

• Clear and appropriate organization, which will likely be one of the following types: o Spatial organization, when you want readers to visualize the mechanism or process as a static object (e.g., house interior, document, disk box)

o Functional organization, when you want the reader to see a mechanism or a process in action (e.g., camera, smoke detector)

o Chronological organization, when you want the reader to see a mechanism or a process according to how it was put together (e.g., tent, piece of furniture)