

## Advice Table for Technical Memos

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Advice	Explanation	Example
<p><i>Respond to your reader's needs. Most work assignments should respond to a reader's specific request for information</i></p>	<p>Consider the factors that govern your reader's interest in your memo and address those factors in the way you organize your memo:</p> <ul style="list-style-type: none"> <li>• Has the reader asked for specific information, often in a list of questions?</li> <li>• Is the reader aware of the subject and its importance?</li> <li>• Why does the reader need this information?</li> <li>• What level of detail or evidence will the reader require to accept the content of the memo?</li> </ul>	<p>Rephrase the primary question as a statement to open your memo. That way you make sure you place the most important information <i>first</i>.</p> <ul style="list-style-type: none"> <li>• Here are the data you requested regarding the thermal diffusion experiments. The results should be useful to the Composite Materials Group and should answer their questions regarding our procedures. The attached graphs illustrate our specific results.</li> </ul>
<p><i>Use the <b>Subject</b> line to your advantage.</i></p>	<p>Focus the reader's attention by using a subject line that highlights the critical ideas in your memo. Make the subject precise. A generic subject line can mask the importance of the information.</p>	<p><i>Prefer</i> a subject line such as:</p> <p style="text-align: center;"><b>Subject:</b> Serious Violations of Safety Regulations— Building A3</p> <p><i>Avoid</i> generic or overly broad subject lines such as:</p> <p style="text-align: center;"><b>Subject:</b> Safety Inspections</p>
<p><i>Get to the point.</i></p>	<p>Except for “bad news” situations, begin your memo with the major point you wish to make. Don't make the reader search for the answers to the important question (s).<sup>1</sup></p>	<p><i>Prefer</i> a direct, specific opening:</p> <p>We believe the equations used in our procedure are valid for use in the design you propose (<i>followed by a list of reasons why and any limitations or qualifiers to your statement.</i>)</p>

<sup>1</sup> This custom holds true in Western cultures. In some Eastern cultures, it is considered rude to get right to the point.

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<p><i>Give structure to the information.</i></p>	<p>Make sure that headings, paragraphs, and lists reflect distinct groups of information arranged in an order that makes sense to your reader. The reader needs to follow the strict line of reasoning and evidence that leads to your primary points. Avoid mixing ideas or going off on points that are not centrally related to your conclusions.</p>	<p><i>Prefer</i> a structure that illustrates the structure of ideas:</p> <p>The equations we used would not suit your design for two reasons:</p> <ul style="list-style-type: none"> <li>• The 30 ft. depth of your tanks will introduce stratification;</li> <li>• The use of salt water in your tanks will create a variation in specific gravity.</li> </ul> <p><i>Avoid</i> mixing unrelated ideas in a single chunk of information or hiding structure in linear text:</p> <p>The equations we used would not suit your design for two reasons. According to the hydrostatic theory, the forces act at the center of pressure of the submerged area The 30 ft. depth of your tanks will introduce stratification. Another reason is that the use of salt water in your tanks</p>
<p><i>Use a direct, personal tone</i></p>	<p>Remember that memos are written <i>by people for people</i> (normally within the same organization). Address your reader directly in a level of formality that is appropriate to your working relationship with the reader and to the purpose of the memo. So in most technical memos at work, the tone would be less formal than in a lab report written for company archives or a report in a professional journal.</p>	<p>Prefer a direct style:</p> <p>We remain available to answer any questions you have about these findings.</p> <p><i>Avoid</i> stiff, institutional prose:</p> <p>It is stated here that investigators in the Engineering Applications Division will continue to remain available to render assistance in the understanding of the above listed findings.</p>

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<i>Maintain precision in your writing.</i>	The words and the data need to match in ways that precisely characterize the technical content.	<p><i>Prefer</i> modifiers that appear closely linked to data:</p> <p>The coils continued to function within design parameters even at temperatures up to 145° F.</p> <p><i>Avoid</i> using modifiers that don't connect to data:</p> <p>The coils functioned well even at high temperatures.</p>
<i>Place subjects and verbs in proximity.</i>	You can sometimes produce unclear sentences when you place too many words between the subject of a sentence and its verb. Multiple sentences instead of one long one can sometimes improve clarity.	<p>Prefer close proximity between subject and verb for clarity such as:</p> <p>In order to measure the daily total precipitation, data were compared and averaged at each point (from both the tipping bucket rain gauge and the plastic rain gauge).</p> <p>Avoid too many words and prepositional phrases between subject and verb such as:</p> <p>Data at each point, from both the tipping bucket rain gauge and the plastic rain gauge, in order to measure the daily total precipitation, were compared and averaged.</p>
<i>Label tables and graphs.</i>	<ul style="list-style-type: none"> <li>• All tables and graphs are labeled using a number and caption describing the content of the graph or table.</li> <li>• Caption titles are placed above the table, and below the figure or graph. Titles contain enough detail to make the content clear at first glance.</li> </ul>	<p>Table 1. Homestead Wood Products Test Values</p> <p>Figure 1. Distribution of Test Results: Homestead No. 2 White Pine--Compressive Strength of 30 Samples Tested to Failure.</p>
<i>Summarize data and results in tables</i>	Use tables to summarize data and/or results to make it easier for the reader to find this information in the memo.	
<i>Reference all tables and graphs in main body of memo.</i>	When discussing data or information contained in tables and/or	

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<i>Use consistent and proper terminology</i>	<p>graphs, be sure to reference table/graph by number regardless if it is in the main body of the memo or as an attachment.</p> <p>Repeating the same word for the same term can help readers when material is complex and terms have specific meanings that are tied to specific words.</p> <p>Use proper engineering terminology when explaining design calculations or concepts.</p>	<p>Prefer the same word such as:</p> <p>A thorough assessment of the potential of the proposed advanced <b><i>control concept</i></b> will require significant additional work. This current proposal will be the beginning of a more elaborate effort to evaluate and finally test the new <b><i>control concept</i></b> in real-world roadway networks.</p>