

# List of useful LaTeX commands

## Preamble essentials

<code>\documentclass{&lt;type&gt;}</code>	Overall layout
<code>\usepackage{&lt;pkg&gt;}</code>	Loads a package
<code>\title{your-title}</code>	Title
<code>\author{your-name}</code>	Author
<code>\date{2025-02-31}</code>	Date

## Sectioning

<code>\section{Section 1}</code>	Numbered section
<code>\section*{Section}</code>	Unnumbered section <sup>a</sup>
<code>\subsection{Subsection 1.1}</code>	Subsection
<code>\subsubsection{Subsubsection 1.1.1}</code>	Subsub-section
<code>\paragraph{Paragraph}</code>	Paragraph
<code>\subparagraph{Subparagraph}</code>	Subparagraph

## Markup

<code>\textbf{Bold}</code>	<b>Bold</b>
<code>\textit{Italics}</code>	<i>Italics</i>
<code>\textsl{Slanted}</code>	<i>Slanted</i>
<code>\textsc{Small caps}</code>	SMALL CAPS
<code>\underline{Underline}</code>	<u>Underline</u>

## Lists and floats

<code>\begin{itemize} ... \end{itemize}</code>	Bulleted list
<code>\begin{enumerate} ... \end{enumerate}</code>	Numbered list
<code>\begin{description} ... \end{description}</code>	Description list

<code>\item</code>	List item
<code>\begin{figure} ... \end{figure}</code>	figure environment
<code>\includegraphics{&lt;path&gt;}</code>	Adds a picture
<code>\caption{Caption}</code>	Caption
<code>\begin{table} ... \end{table}</code>	Tabular container
<code>\begin{tabular} ... \end{tabular}</code>	Creates a table
<code>\label{&lt;label&gt;}</code>	Creates a label
<code>\ref{&lt;label&gt;}</code>	References a fig/tab/eq

## Math

<code>\usepackage{amsmath}</code>	Loads amsmath package
<code>\$...\$ or \(...\)</code>	Inline math mode
<code>\$\$...\$\$ or \[...]</code>	Display math mode
<code>\begin{equation} ... \end{equation}</code>	equation environment
<code>\begin{gather} ... \end{gather}</code>	gather environment
<code>\begin{align} ... \end{align}</code>	align environment

## Chemistry

<code>\usepackage{mhchem}</code>	Loads mhchem package
<code>\ce{C6H12O6}</code>	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>
<code> \$\to\$ </code>	→
<code> \$\rightleftharpoons\$ </code>	⇌

## R integration (knitr/Sweave)

<code>&lt;&lt;options&gt;&gt;== ... @</code>	R code block
<code>echo = TRUE/FALSE</code>	Show R code in the document?
<code>eval = TRUE/FALSE</code>	Evaluate the code?

<code>include = TRUE/FALSE</code>	Show code and output?
<code>message = TRUE/FALSE</code>	Show messages?
<code>warning = TRUE/FALSE</code>	Show warnings?

This template is released under the MIT license.

<sup>a</sup>This carries over to subsections and subsubsections as well.