

# L<sup>A</sup>T<sub>E</sub>X Notes

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## 1 Some L<sup>A</sup>T<sub>E</sub>X commands

- Use `\textbf{text bold}` to make **text bold**
- Use `\red{text red}` to make **text red** (you also need to add `\newcommand{\red}[1]{\textcolor{red}{#1}}` to the top of your document, after `\documentclass{article}`)
- Use `\textit{text italic}` to make *text italic*
- Use `\underline{text underlined}` to make text underlined
- Use `\section{Some simple \LaTeX\ commands}` to make a new section, like this one

## 2 Creating Lists

```
Use \begin{itemize}
\item to make a bullet point list
\end{itemize}
```

- to make a bullet point list

```
Use \begin{enumerate}
\item to make a bullet point list
\end{enumerate}
```

1. to make a numbered list

## 3 Adding images

```
\begin{figure}[H]
\begin{center}
\includegraphics[width=0.6\linewidth]{Transit.jpg}
\caption{This is a picture I wanted to include in my document.}
```

```

\label{graphic:mypicture}
\end{center}
\end{figure}

```

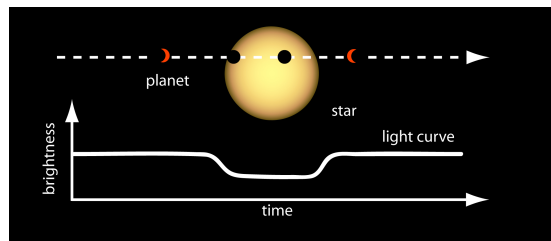


Figure 1: This is a picture I wanted to include in my document.

You also need to:

1. Add `\usepackage{graphicx}` at the start of your document to allow the use of images.
2. You need to load your image using the file upload in the top left of your browser window.
3. Try compiling your document and see if you get a warning that there is another package you need to add... add it and try again!

## 4 Creating a table

```

\begin{table}[H]
\centering
\caption{Solar System Object Characteristics}
\begin{tabular}{lll}
\hline\hline
Property & Value & Units \\
\hline
Radius & 3 & km \\
Temperature & 270 & K \\
\hline\hline
\end{tabular}
\end{table}

```

(Note that lll are the letter l, not the number 1)

Table 1: Solar System Object Characteristics

Property	Value	Units
Radius	3	km
Temperature	270	K

## 5 Adding references

1. Go to google scholar
2. Search for a topic e.g. "atmosphere of (your planet/moon)"
3. Click the quotation mark symbol under the relevant article
4. Select "BibTex"
5. In ShareLatex, select "new file" on the top left
6. Call the file "planet.bib"
7. Copy and paste the bibtex tex into that file
8. Rename the name of the bibtex item (the first line e.g. `@article{generatedname,}` to the format `YYAaBbCc`, where YY is the year (85 in the example below), Aa is the first two initials of the first author, Bb of the second ... up to three authors. If there is just one author you can add their full last name. See the example below.

```
@article{85PoMo,
  title={Discovery of sodium in the atmosphere of Mercury},
  author={Potter, Andrew and Morgan, Thomas},
  journal={Science},
  volume={229},
  pages={651--654},
  year={1985},
  publisher={American Association for the Advancement of Science}
}
```

9. Add to the end of your latex document, just before `\end{document}`:
 

```
\bibliographystyle{elsarticle-num}
\bibliography{planet}
```
10. To add this citation to your latex document, use `\cite{85PoMo}`  
 This will output a number which corresponds to the reference list at the end.  
 e.g. There is evidence of sodium on Mercury [1]

11. add `\usepackage{hyperref}` to the start of your latex document, so that if you click the citation number it will jump to the reference information at the end

## References

- [1] A. Potter, T. Morgan, Discovery of sodium in the atmosphere of mercury, *Science* 229 (1985) 651–654.