

Yet Another Markdown Cheatsheet

Including Markdown, MultiMarkdown, pandoc, GFM and LaTeX Math Syntax by MathJax

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Part I

Introduction

Examples ([Part II](#)) shows explicit examples for different syntaxes. Other Syntaxes ([Part V](#)) show the syntaxes that can't be shown explicitly.

1 Organization

- Header levels (except possibly the last header level): features in groups
- Last header level or a list: different syntaxes
- TaskPaper-styled tags to indicate in what favor of Markdown such syntax is supported
 - `@markdown`: supported by original markdown, hence understood to be supported by all variants of markdown
 - `@ghpages`: GitHub-Favored Markdown, built by kramdown with GFM option. i.e. GitHub Pages' GitHub-Favored Markdown
 - `@mmd`: MultiMarkdown
 - `@pandoc`: pandoc-favored markdown
 - `@phpextra`: PHP Markdown Extra (inspired some syntax in pandoc and mmd and gfm, not exhaustively tested here)

Note:

- You might see `<!-- \begin{comment} -->...<!-- \end{comment} -->`. This is for mmd to tex to pdf use only. Ignore this.

Part II

Examples

2 Header

@markdown

See Emphasis ([chapter 4](#)) and Other Syntaxes ([Part V](#)) to see alternative Setext-style header styles @markdown

2.1 Header *Containing Styling* and a [Link](#)

@markdown

2.2 Header Containing Attributes {#identifier .class1 key=value1}

@pandoc @phpextra

2.3 Header Unnumbered {-}

@pandoc

2.4 Header Unnumbered 2 {.Unnumbered}

@pandoc

2.5 Auto Cross Reference

- Link to Header ([chapter 2](#)) @pandoc @ghpages @mmd
- Link to Header ([chapter 2](#)) @pandoc @mmd
- Header ([chapter 2](#)) @mmd @pandoc
- Header ([chapter 2](#)) @mmd @pandoc

2.6 User defined reference

- userdefinedreference ([section 2.6](#)) @mmd @pandoc(extension:mmd_header_identifiers)
- Link to “Header Containing Attributes” (??) @pandoc
- another-link (??) @pandoc

2.7 Deeper Levels of Headers

2.7.1 Header4

2.7.1.1 Header5

2.7.1.1.1 Header6 3 Backslash Escapes

testing @markdown

4 Emphasis

- *italic* or *italic* @markdown
- **bold** or **bold** @markdown
- ***bold italic*** or ***bold italic*** @markdown
- ~~strikethrough~~ @pandoc
- Small caps @pandoc @markdown(html)

4.1 CriticMarkup

Visually it looks like emphasis. Functionally it is much more, and called Critic Markup @mmd

See more at [CriticMarkup—MultiMarkdown Documentation¹](http://fletcher.github.io/MultiMarkdown-5/criticmarkup.html).

5 Horizontal Rules

@markdown

3 or more hyphens or asterisks

6 Break

@markdown

No break like this

Soft break

like this

Hard break

¹<http://fletcher.github.io/MultiMarkdown-5/criticmarkup.html>

like this

7 Superscript & Subscript

- x^2 @mmd
- d_o @mmd
- x^{a+b} @mmd @pandoc
- $x_{y,z}$ @mmd @pandoc
- $P_a \setminus \text{cat} \sim$ @pandoc

8 Smarty Pants

@markdown(extension:smartypants) @pandoc(-smart) @ghpages

- “Example 1”
- ‘Example 2’
- “Example 3”
- en-dash
- em—dash
- ellipsis...

9 Abbreviations (PHP Markdown Extra)

@mmd @phpextra @pandoc(extension:abbreviations)

Testing abbreviations: HyperText Markup Language (HTML), World Wide Web Consortium (W3C) (mouseover it to see)

10 Lists

10.1 Ordered Lists

@markdown

1. test
2. test
3. test

10.2 Unordered Lists

@markdown

- test
- test
- test

10.3 Nested Lists

@markdown

- test
 - test
- test
 1. test
 2. test
 - test
 - a) test
 - b) test
 3. test
- test

Note about LaTeX output in mmd/pandoc:

- The Maximum nesting level of lists in LaTeX is 4. The quick hack is to mix itemize and enumerate alternatively to go beyond this.

10.4 Cutoff a List

@markdown

1. one
 2. two
 3. three
-
1. uno
 2. dos
 3. tres
-
- item one

- item two

end of list

```
{ my code block }
```

10.5 List Item in a Block

@markdown

- First paragraph.
Continued.
- Second paragraph. With a code block, which must be indented eight spaces:

```
{ code }
```

10.6 Fancy Lists

@pandoc

Part III

. one

Part IV

. two

9) Ninth 10) Tenth 11) Eleventh i. i ii. ii iii. iii (2) Two (5) Three 1. Four * Five

11 Definition Lists

11.1 Method 1

@mmd @phpextra @pandoc @ghpages

Physics The Fundamental of Science

Describe the Nature

Make Prediction

11.2 Method 2

@ghpages @pandoc @mmd

Term 1 Definition 1

Term 2 with *inline markup* Definition 2

{ some code, part of Definition 2 }

Third paragraph of definition 2.

12 Numbered Example Lists

@pandoc

(@) My first example will be numbered (1). (@) My second example will be numbered (2).

Explanation of examples.

(@) My third example will be numbered (3).

(@good) This is a good example.

As (@good) illustrates, ...

13 Code

- `testing` @markdown
- `\[\ket{a}\]\{.latex\}` @pandoc

13.1 Fenced Code Blocks

13.1.1 Method 1

```
@markdown
test
test
    test
    # test
```

13.1.2 Method 2

```
@markdown(partial:language-not-supported) @ghpages @pandoc @mmd
\ nabla \ times \mathbf{E} = - \frac{\partial \mathbf{B}}{\partial t}
```

13.1.3 Method 3

```
@pandoc
~~~markdown test test test # test ~~~
~~~ {#mycode .markdown .numberLines startFrom="100"} test test test # test ~~~
```

14 Block-quotes

```
@markdown
```

14.0.1 Test

```
test

test
test

• test
• test
```

14.1 Block-quotes Quoting Codes

```
@markdown
\newcommand...
```

15 Line Blocks

```
@ghpages(partial) @pandoc
| The limerick packs laughs anatomical | In space that is quite economical. | But the good
ones I've seen | So seldom are clean | And the clean ones so seldom are comical
```

| 200 Main St. | Berkeley, CA 94718

16 Tables

16.1 Method 1

@ghpages @pandoc @mmd

| **Right** | **Left** | **Default** | **Center** |

|——:|:——|———|:——:|

| **12** | **12** | **12** | **12** |

| **123** | **123** | **123** | **123** |

| **1** | **1** | **1** | **1** | Notice how pandoc can have optional caption like this

16.2 Method 2

@mmd

Table 1: Table Caption

| Left align | Right align | Grouping Center align |
|---|--|---|
| This column will be left aligned | This column will be right aligned | This column will be center aligned |
| And a big grouping is like this | | |

16.3 Method 3

@pandoc

Right Left Center Default ——— ——— ——— ——— 12 12 12 12 123 123 123 123 1 1 1 1
Table: Demonstration of simple table syntax.

16.4 Method 4

@pandoc

Centered Default Right Left Header Aligned Aligned Aligned ——— ——— ———
 ——— First row 12.0 Example of a row that spans multiple lines.
 Second row 5.0 Here's another one. Note the blank line between

rows.

Table: Here's the caption. It, too, may span multiple lines.

16.5 Method 5

@pandoc Sample grid table.

| | Fruit | Price | Advantages |
|---------|--------|--------------------|----------------|
| Bananas | \$1.34 | - built-in wrapper | - bright color |
| Oranges | \$2.10 | - cures scurvy | - tasty |

16.6 Method 6

@ghpages

See [Syntax | kramdown²](#)

17 Links

- `https://www.wikipedia.org @pandoc(extension:autolink_bare_uris)`
- `https://www.wikipedia.org @markdown`
- `Wikipedia.org3 @markdown`
- `Wikipedia.org4 @markdown`
- `Mail to GitHub5 @markdown`

17.1 Reference Links

- [Search here](#)⁶ @markdown
- A [link](#)⁷ with attributes. @mmd
- [Another link to the link above](#)⁸. @mmd
- A [link](#)¹⁹ with attributes. @markdown

²<http://kramdown.gettalong.org/syntax.html#tables>

³<https://www.wikipedia.org>

⁴<https://www.wikipedia.org>

⁵<mailto:support@github.com>

⁶<https://www.google.com>

⁷[image.png](#)

8 image.png

9 /foo/bar.html

- [Another link](#)¹⁰. @markdown
- [link3](#)¹¹. @markdown

18 Footnotes

- Footnotes ¹² @mmd
- Footnotes [^][This is a pandoc inline footnote] @pandoc

18.1 Reference Footnotes

- Footnotes¹³ @markdown
- Long Footnotes ¹⁴ @pandoc @ghpages @mmd

This paragraph won't be part of the note, because it isn't indented.

18.2 Glossaries

A special kind of footnote . @mmd

See more at [Glossary—MultiMarkdown Documentation](#)¹⁵.

18.3 Citations

It can look like footnotes in HTML output.

18.3.1 MultiMarkdown

@mmd

- This is a statement that should be attributed to its source (1, p. 23).

See more at [Citations—MultiMarkdown Documentation](#)¹⁶.

¹⁰<http://fsf.org>

¹¹[/bar#special](#)

¹²This is a mmd inline footnote

¹³This is a footnote

¹⁴Here's one with multiple blocks.

Subsequent paragraphs are indented to show that they belong to the previous footnote.

```
{ some.code }
```

The whole paragraph can be indented, or just the first line. In this way, multi-paragraph footnotes work like multi-paragraph list items.

¹⁵<http://fletcher.github.io/MultiMarkdown-5/glossary.html>

¹⁶<http://fletcher.github.io/MultiMarkdown-5/citations.html>

18.3.2 Pandoc

@pandoc

Very powerful but complicated. See more at [Citations—Pandoc Documentation](http://pandoc.org/README.html#citations)¹⁷.

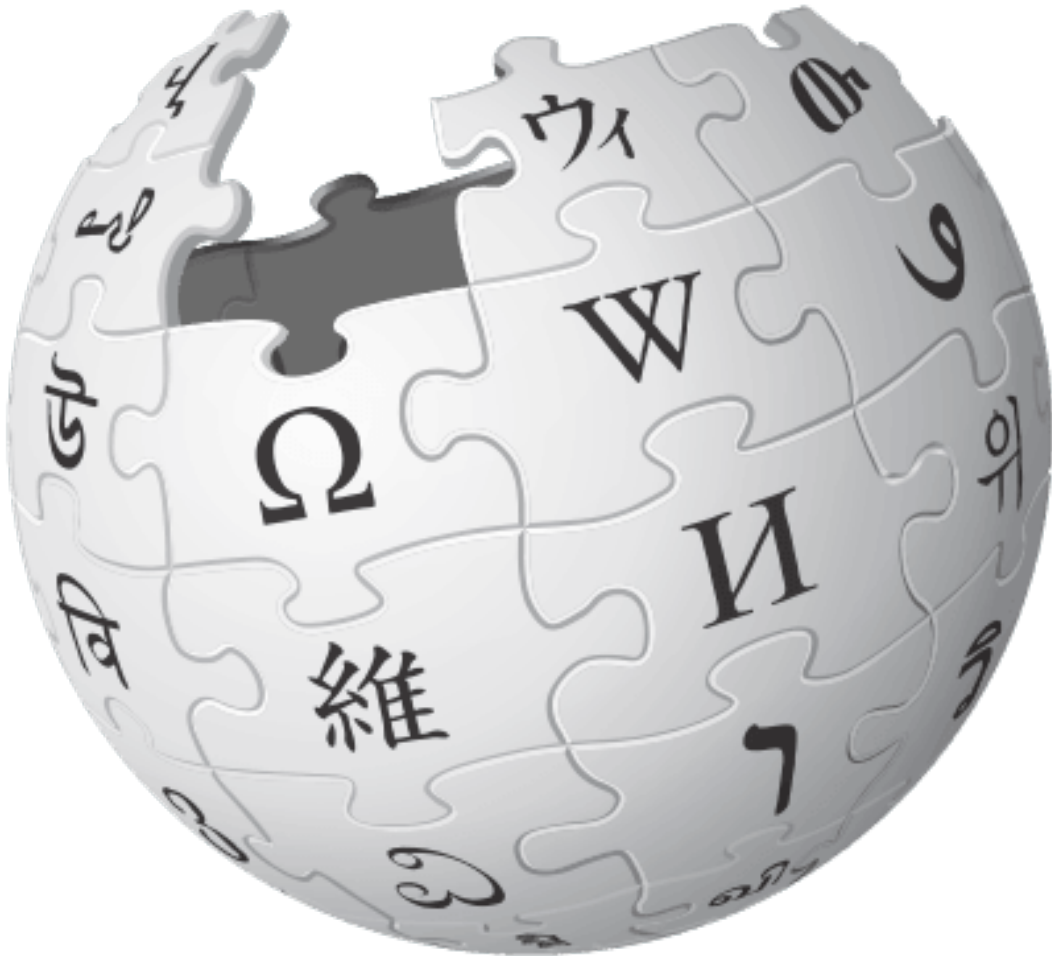
19 Images



•
@markdown

¹⁷<http://pandoc.org/README.html#citations>

19.1 Reference Images



- @markdown
-  @mmd @pandoc(extension:mmd_link_attributes)



- `.class width=30 height=20px}` @pandoc @phpextra(partial)
- a reference `![image][ref]` with attributes. @pandoc @phpextra(partial)

[ref]: image.png “optional title” {#id .class key=val key2=“val 2”}

{#id

19.2 Image with Links by Nesting Image and Link



- @markdown

18

19.3 Block Level Images

- Block level: HTML `figure` element in MultiMarkdown @mmd @pandoc

¹⁸<https://www.wikipedia.org/>

Figure 1: *Block Level*

- This *is* markdown @mmd @pandoc(non-default-extension:markdown_attribute)

See more at [Raw—MultiMarkdown Documentation](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should)¹⁹. See test in [Babelmark 2 - Compare markdown implementations](http://johnmacfarlane.net/babelmark2/?normalize=1&text=%3Cdiv%3EThis+should).

20.2 LaTeX

- @mmd
- \newcommand\rawlatex{} @pandoc(parsed)
- \begin{...} @pandoc

¹⁹<http://fletcher.github.io/MultiMarkdown-5/raw.html>

Part V

Other Syntaxes

21 Metadata

21.1 MultiMarkdown Metadata Block

```
@mmd @pandoc(extension:mmd_title_block)
  Title:      A Sample MultiMarkdown Document
  Author:     Fletcher T. Penney
  Date:       February 9, 2011
  Comment:    This is a comment intended to demonstrate
              metadata that spans multiple lines, yet
              is treated as a single value.
  CSS:        http://example.com/standard.css
```

See more at [Metadata—MultiMarkdown Documentation](http://fletcher.github.io/MultiMarkdown-5/metadata.html)²⁰.

21.2 Pandoc Title Block

```
@pandoc
  % title
  % author(s) (separated by semicolons)
  % date
```

21.3 YAML Metadata Block

```
@Mmd(Partial)
  @pandoc @ghpages
  ---
  title:      A Sample MultiMarkdown Document
  author:     Fletcher T. Penney
  date:       February 9, 2011
  tags: [nothing, nothingness]
  abstract: |
    This is the abstract.

    It consists of two paragraphs.
  ---
```

22 TOC

22.1 Pandoc

```
@pandoc
  Use --toc as a command argument.
```

²⁰<http://fletcher.github.io/MultiMarkdown-5/metadata.html>

22.2 MultiMarkdown

@mmd

{{TOC}}, see beginning. It preprocess the headings and generate a ToC on its own, and doesn't give instruction for LaTeX to generate one. A hack is like this:

```
---
...
LaTeX Input:    mmd-load-toc-setcounter
LaTeX Input:    mmd-load-toc
...
---
<!-- \begin{comment} -->
{{TOC}}
<!-- \end{comment} -->
...
```

See more at [ickc/peg-multimarkdown-latex-support](https://github.com/ickc/peg-multimarkdown-latex-support): Default support files for generating LaTeX documents with MMD 3 through MMD 5²¹.

22.3 Kramdown

@ghpages

```
# Contents
{:no_toc}

* Will be replaced with the ToC, excluding the "Contents" header
{:toc}
```

23 Math

MathJax is assumed. MathJax has many configurable options. See [MathJax TeX and LaTeX Support — MathJax 2.6 documentation](https://mathjax.readthedocs.org/en/latest/tex.html)²².

23.1 Markdown

@markdown

Add the following at the beginning of the document:

```
<script type="text/javascript"
  src="https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS_HTML"
</script>
```

²¹<https://github.com/ickc/peg-multimarkdown-latex-support>

²²<http://mathjax.readthedocs.org/en/latest/tex.html>

MathJax.js is used and any codes within math delimiters are treated as raw HTML and to be processed by MathJax.

MathJax delimiter are $\$$. . . \$$, $\backslash(\dots\backslash)$ and $\backslash[\dots\backslash]$ (because an extra \backslash can be used to escape from Markdown).

Depending on the markdown parser, extra tricks might be needed to make sure nothing within the math delimiter is treated as markdown (see [TeX and LaTeX in HTML documents — MathJax 2.6 documentation](#)²³). $\$$. . . \$$ can be used with MathJax configuration (see [TeX and LaTeX math delimiters — MathJax 2.6 documentation](#)²⁴).

23.2 MultiMarkdown and Pandoc

There are subtleties how math should be used in HTML+MathJax and LaTeX output from single markdown source. See more in [Testing LaTeX Environments Usage in MathJax From Markdown Conversion \(including mmd and pandoc\)](#)²⁵.

23.2.1 MultiMarkdown

@mmd

Add the following metadata at the beginning of the document:

```
HTML header:    <script type="text/javascript"
                  src="https://cdn.mathjax.org/mathjax/latest/MathJax.js?config=TeX-AMS_CHTML-
                  </script>
```

MultiMarkdown math delimiter are $\$$. . . \$$, $\$$. . . \$$, $\backslash(\dots\backslash)$ and $\backslash[\dots\backslash]$.

23.2.2 Pandoc

@pandoc

For pandoc, add `--mathjax` in the command-line argument.

Default math delimiter for pandoc is $\$$. . . \$$, $\$$. . . \$$. Other options are configurable. See more in [Pandoc - Pandoc User's Guide](#)²⁶.

23.3 Inline Math

- $1 + 1$
- $1 + 1$

23.4 Block Math

- $$RR^T = I$$
- $$A_S^T = B$$

²³<http://mathjax.readthedocs.org/en/latest/tex.html#tex-and-latex-in-html-documents>

²⁴<http://mathjax.readthedocs.org/en/latest/tex.html#tex-and-latex-math-delimiters>

²⁵<https://github.com/ickc/mathjax-latex-md-mmd-pandoc>

²⁶<http://pandoc.org/README.html#non-pandoc-extensions>

23.5 Other Examples

•

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

- $$\begin{aligned} \dot{x} &= \sigma(y-x) \\ \dot{y} &= \rho x - y - xz \\ \dot{z} &= -\beta z + xy \end{aligned}$$

•

$$\left(\sum_{k=1}^n a_k b_k \right)^2 \leq \left(\sum_{k=1}^n a_k^2 \right) \left(\sum_{k=1}^n b_k^2 \right)$$

•

$$\mathbf{V}_1 \times \mathbf{V}_2 = \begin{vmatrix} \mathbf{i} & \mathbf{j} & \mathbf{k} \\ \frac{\partial X}{\partial u} & \frac{\partial Y}{\partial u} & 0 \\ \frac{\partial X}{\partial v} & \frac{\partial Y}{\partial v} & 0 \end{vmatrix}$$

•

$$P(E) = \binom{n}{k} p^k (1-p)^{n-k}$$

•

$$\frac{1}{(\sqrt{\phi\sqrt{5}}-\phi)e^{\frac{2}{5}\pi}} = 1 + \frac{e^{-2\pi}}{1 + \frac{e^{-4\pi}}{1 + \frac{e^{-6\pi}}{1 + \dots}}}$$

- $$\begin{aligned} \nabla \times \vec{\mathbf{B}} &= \frac{1}{c} \nabla \left(\frac{\partial \mathbf{E}}{\partial t} \right) \\ \frac{4\pi}{c} \vec{\mathbf{j}} &= \nabla \cdot \vec{\mathbf{E}} \\ \rho &= \nabla \cdot \vec{\mathbf{E}} \\ \nabla \times \vec{\mathbf{E}} &= -\frac{1}{c} \frac{\partial \vec{\mathbf{B}}}{\partial t} \\ \nabla \cdot \vec{\mathbf{B}} &= 0 \end{aligned}$$

•

$$1 + \frac{q^2}{(1-q)} + \frac{q^6}{(1-q)(1-q^2)} + \cdots = \prod_{j=0}^{\infty} \frac{1}{(1-q^{5j+2})(1-q^{5j+3})}, \quad \text{for } |q| < 1.$$

24 File Transclusion

@mmd

See more at [File Transclusion—MultiMarkdown Documentation](http://fletcher.github.io/MultiMarkdown-5/transclusion.html)²⁷.

²⁷<http://fletcher.github.io/MultiMarkdown-5/transclusion.html>

Part VI

References

Some examples are directly or indirectly copied from the following documentations:

1. [Pandoc - Pandoc User's Guide](#)²⁸
2. [MultiMarkdown User's Guide](#)²⁹
3. [Syntax | kramdown](#)³⁰

Bibliography

- [1] John Doe. *Some Big Fancy Book*. Vanity Press, 2006.
- [2] John Doe. *Another Big Fancy Book*. Vanity Press, 2016. [18](#)

²⁸<http://pandoc.org/README.html>

²⁹<http://fletcher.github.io/MultiMarkdown-5/>

³⁰<http://kramdown.gettalong.org/syntax.html#tables>