An quick intro to note taking using Markdown and Obsidian

A quick intro to note taking using Markdown

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Why bother taking notes?

- We as human only have a short memory
- Notes help us remember important things

A second brain, for you, forever.



What is Markdown?

A lightweight markup language for creating formatted text using a plain-text editor.

Why use **Markdown**?

- Easy to read
- Easy to write
- Free and non-proprioetry

Markdown syntax -- header

```
# Header 1
## Header 2
### Header 3
```

Header 1

Header 2

Header 3

--

Markdown syntax -- font

```
*Italic1* _Italic2_

**Bold1** __Bold2__

~~Strikethrough~~
==Highlight==
```

Italic1 Italic2

Bold1 Bold2

Strikethrough

Highlight

Markdown syntax -- list

```
# unordered list
    - item 1
    - item 2
    - item 3
# ordered list
    1. item 1
    2. item 2
    3. item 3
```

unordered list

- item 1
- item 2
- item 3

ordered list

- 1. item 1
- 2. item 2
- 3. item 3

--

Markdown syntax -- link

```
[USU](https://www.usu.edu/)
```

USU

__

Markdown syntax -- check box

```
check box
- [ ] to do
- [x] done
```

check box

to do



--

Markdown syntax -- math

Accept LaTex and MathJax format

```
- inline math use single $:
Darcy's Law: $q=-K\frac{dh}{dx}$
- math block use double $:
$$
\frac{{{\partial}}}{{{\partial}}}\left(\varphi s\eta\right) +
{\boldsymbol{\nabla}}\cdot\left(\eta{\boldsymbol{q}}\right) = Q_w
$$
```

- Darcy's Law: $q = -K \frac{dh}{dx}$
- Math block using LaTex

$$rac{\partial}{\partial t}(arphi s \eta) + oldsymbol{
abla} \cdot (\eta oldsymbol{q}) = Q_w$$

--

Markdown syntax -- code

- inline code: import numpy; print("abs(-5)=numpy.abs(-5)")
- code block

```
import numpy
print("abs(-5)=numpy.abs(-5)")
```

__

Markdown syntax -- table

```
| Col 1 | Col 2 | Col 3 |
|-----: |:-----: |:------|
| x | 1 | 3 |
| y | 2 | 4 |
```

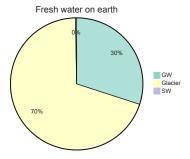
Col 1	Col 2	Col 3
х	1	3
у	2	4

--

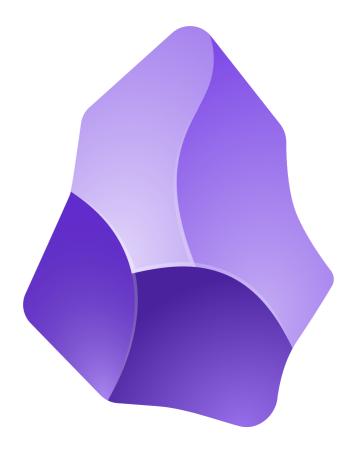
Markdown extra -- chart

- Some app support Mermaid diagrams and charts
- In the code block, use mermaid as the language

```
pie title Fresh water on earth
   "GW" : 30
   "Glacier" : 69.7
   "SW" : 0.3
```



Introducing Obsidian

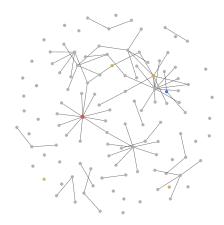


Why Obsidian?

- Support Markdown plus additional syntax (e.g., Mermaid, callouts, internal links)
- Create a mind map that functions like your brain
- A rich collection of community plugins (e.g., Zotero Integration)
- Free

Example of mind map

Ideas are connected through nodes and links. Each dot represents a note.



References

- 1. <u>Markdown-Based Scientific and Computational Note Taking with Obsidian Water Programming: A Collaborative Research Blog</u>
- 2. Basic formatting syntax Obsidian Help
- 3. About Mermaid | Mermaid
- 1. Utah State University ←