My First Mardown Document

Ethan Dean

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Add text here. Just use it like a typewriter, and add as much or as little as you like.

New text appears here in a separate paragraph.

Ethan Dean
Department of Biology
University of Vermont

Use 2 or more blank spaces at the end of a single-spaced line.

First-level header

Second-level header

Third-level header

Basic text formatting

italic *text* like this

bold **text** like this

subscript$_{\text{text}}$ like this

superscript$^{\text{text}}$ like this

strikesthrough ~~text~~ like this

Lists

Unordered Lists

- Item 1
- Item 2
    - Item 2a
    - Item 2b

Ordered Lists

1. Item 1
2. Item 2
3. Item 3
    - Item 3a
    - Item 3b

Fencing

In line fencing with a backtick `to show anything in plain text with *no* formatting` which can be useful for many things.

In line execution of R inside the backticks by inserting R as the first element 6.1415927

In line execution of R inside the backticks by inserting R as the first element `3 + pi`

3 backticks for a whole section of plain text

```
everything in here is in plain text.
even single lines.

useful especially when showing other coding instructions.
```

Block Quotes with >

> To be or not to be, that is the question. Whether tis nobler... blah blah blah

Spacer line with 3 or more understcores

Adds a line between text...

Links

http://example.com

Linked phrase

A linked phrase.

At the bottom of the document:

Images

Images

```
![alt text](http://example.com/logo.png)

![alt text](figures/img.png)
```

Table

First Header	Second Header
Content Cell	**Formatted Text**
Content Cell	*Formatted Text*

LaTek code for equations

We set off equations with `$` for brackets.

In-line versus stand-alone equations

These equations such as $a = 3 + 4$ will appear inside a single line of text.

These equations such as

$$a = 3 + 4$$

will appear in a separate line of their own.

Subscripts

$$H_0 = Z_{a+b}$$

Superscripts

$$S = cA^z$$

Elements can be coupled and nested

$$S = cA_1^z + z_{2+x}$$

Fractions and Greek symbols

$$\alpha = \frac{\beta}{\delta + \gamma_x}$$

Summation Signs

$$z = \sum_{i=1}^{X} K$$

Escape the backslash with a custom term

$$\backslash\alpha \leq b\backslash$$

Rendering plaintext in a LaTex equation

$$P(occurance of Species A) = Z$$

$$P(\text{Occurence of species A}) = Z$$

#R in Markdown

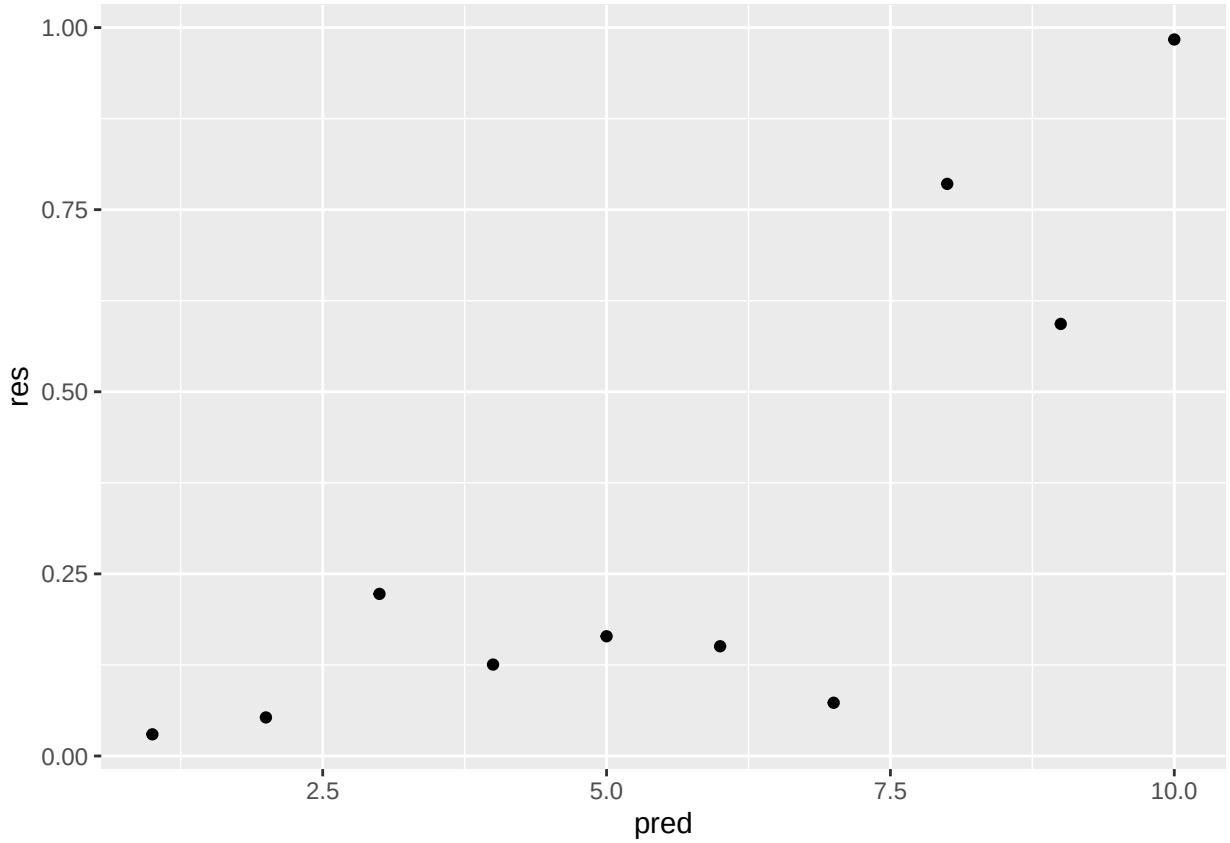
```
# Don't forget to start with comments!
# Preliminaries
library(ggplot2)

pred <- 1:10 #Vector of 10 integers
res <- runif(10) # Random Uniform Values

# Print the random numbers
print(res)
```

```
##  [1] 0.02974317 0.05292177 0.22251722 0.12550006 0.16434196 0.15064816
##  [7] 0.07303308 0.78539049 0.59315412 0.98359710
```

```
#plot the graph
qplot(x=pred,y=res)
```



Now back to writing text in our markdown document, including latex equations if we need them such as $a + b$ inserted in the middle of my sentence