

# **Mango Pagedown Test**

Mango The Cat

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# 1 Chapter Name

## 1.1 Headings

Our training sections usually start at level 2.

## 1.2 Fonts

I've managed to change the fonts to Open Sans in `css/mango-fonts.css` that's about it.

### 1.2.1 Body

Open Sans Light

### 1.2.2 Titles

Might be OK Open Sans. We used to have level 3 as orange which is easy enough. The new font should be Din Regular I think. I've set this in the CSS **but** it might need to be installed. And even then it might default back to Open Sans. Need to watch this.

### 1.2.3 Numbering

Currently use `{chapter}.{section}.{sub-section}`.

Nice to have would be a chapter front page saying Chapter `{Chapter Number}` `{Chapter Name}`.

### 1.2.4 Code

My guess is that the default code is OK but we might want to fancy it up a bit.

```
# A non-executed R-block

f <- function(x) {
  if (is.null(x)) 0 else x
}
```

where as python code might look like

```
# python code looks like this
def f(x):
    """Some big long docstring"""
    return(0 if x is null else x)
```

A code block that returns stuff looks like

```
f <- function(x) {
  if (is.null(x)) 0 else x
}

f(NULL)
```

```
## [1] 0
```

I wonder if that code output could be nicer. Not high priority.

## 1.2.5 Equations

Is it mathjax? I think so. So... It's double dollars for a big equation. I'm changing the font for math I think to Times then serif.

$$E = \gamma mc^2$$

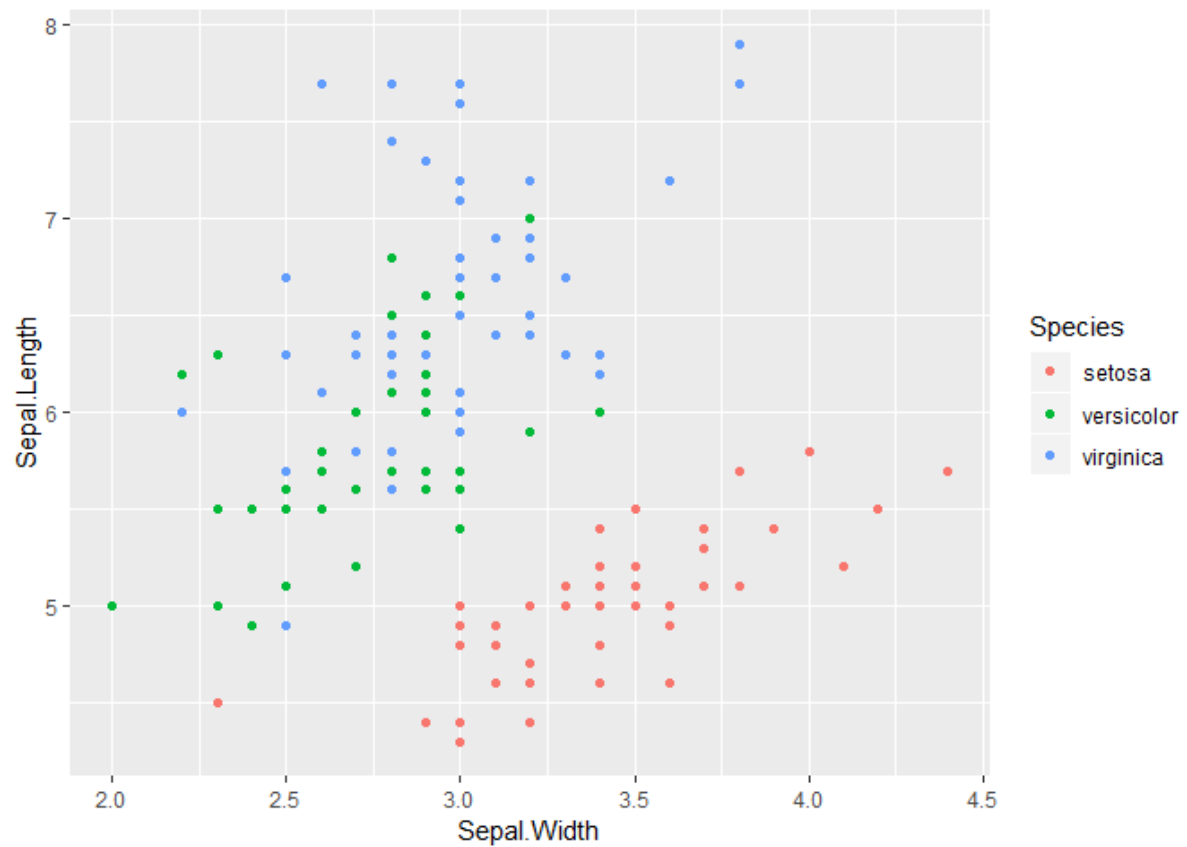
And single dollars for inline  $E = mc^2$  equations.

## 1.3 Plots

We do a fair amount of plots with code

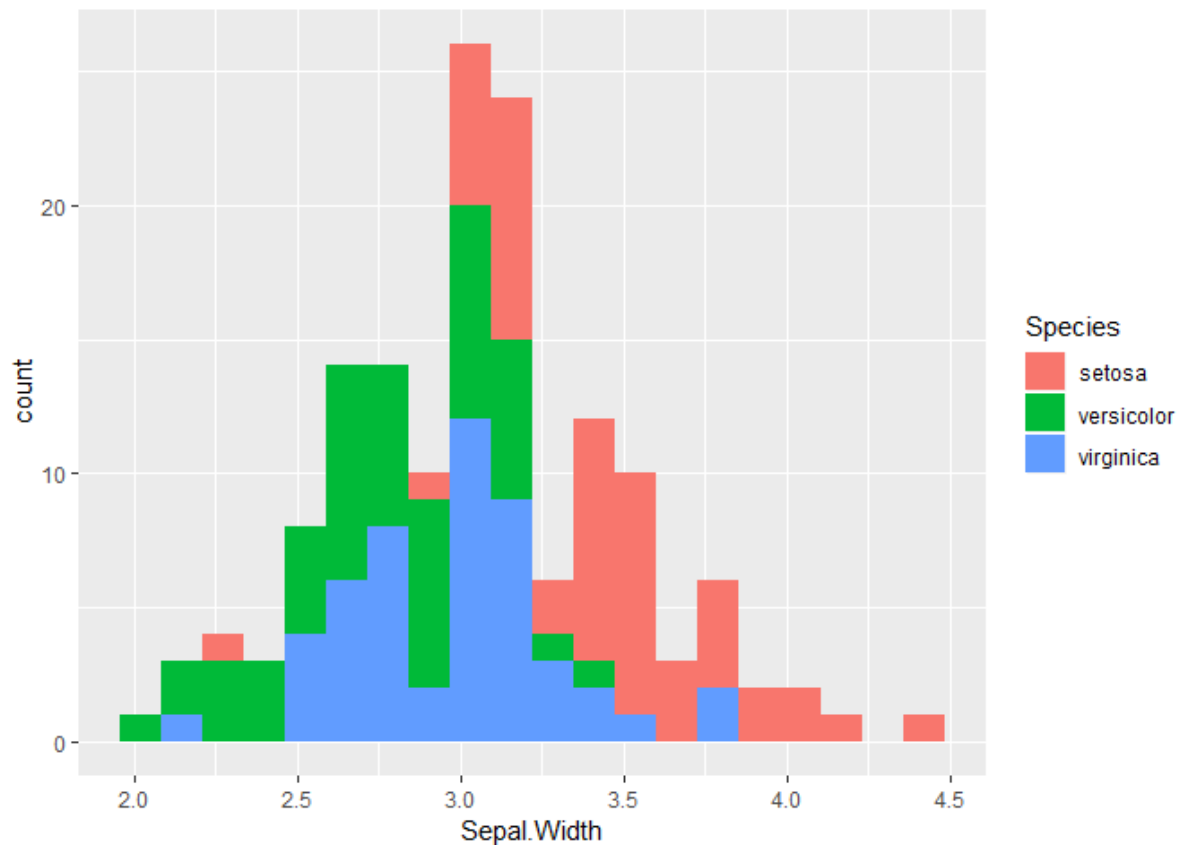
```
library(ggplot2)
ggplot(iris) +
  geom_point(aes(x = Sepal.Width, y = Sepal.Length, colour = Species))
```

## 1.3 Plots



We can manually control size but should have nice defaults

We might do plots with suppressed code.



## 1.4 Exercises and info boxes

We're going to need some way to make exercise boxes. This could be by applying a class to a section heading: `{.exercise}`



### Exercise

It looks like you can use a section header and a class. The code here looks like:

```
### Exercise {.exercisebox - }
```

And then this puts everything until the next section heading in a div with the exercise class. The dash is the part that suppresses the section label. Everything else can be styled with css.

1. Question 1
2. Question 2



### 1.4.1 Warnings

#### Watch out!

Some important warning message. Again, the dash removes the numbering. There is examples of this already in the existing code.

### 1.4.2 Info

#### Interesting info

When we're done can put icons and style it nicely.

## 1.5 Python

Does Python just work? Well it does. Mostly. I'm having some issues with plots too that needs working out.

```
import pandas as pd
df = pd.DataFrame({'a': [1,2,3], 'b':['a', 'b', 'c']})
print(df.head())
```

```
##      a  b
## 0    1  a
## 1    2  b
## 2    3  c
```

Looks OK. I don't love the syntax highlighting but that might be a Pandoc thing. And does it carry through?

```
df.shape
```

```
## (3, 2)
```

OK Good. What about plots?

```
import seaborn as sns
import matplotlib.pyplot as plt
iris = sns.load_dataset("iris")
sns.pairplot(iris, hue="species")
plt.show()
```

The above works in a notebook but crashes in a separate render. What about pure matplotlib

```
import matplotlib.pyplot as plt
import numpy as np
x = np.random.random(20)
y = np.random.random(20)
plt.scatter(x, y)
plt.show()
```

No this hangs too when rendering separately. Darn. It's something to do with Matplotlib loading Qt. RStudio say they've fixed it but I don't think it's fixed.

Perhaps python will have to go into markdown separately until we can fix this?

