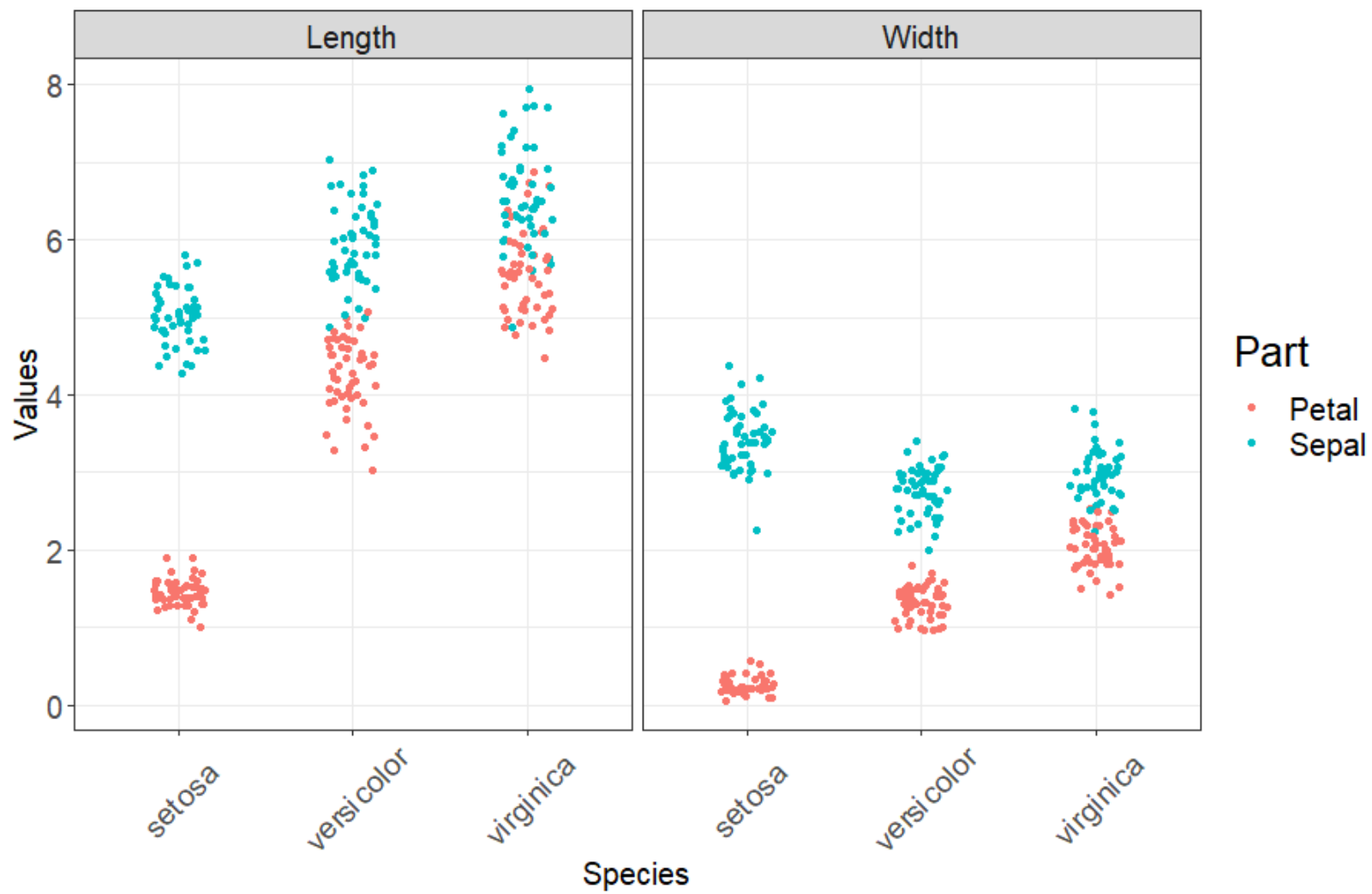
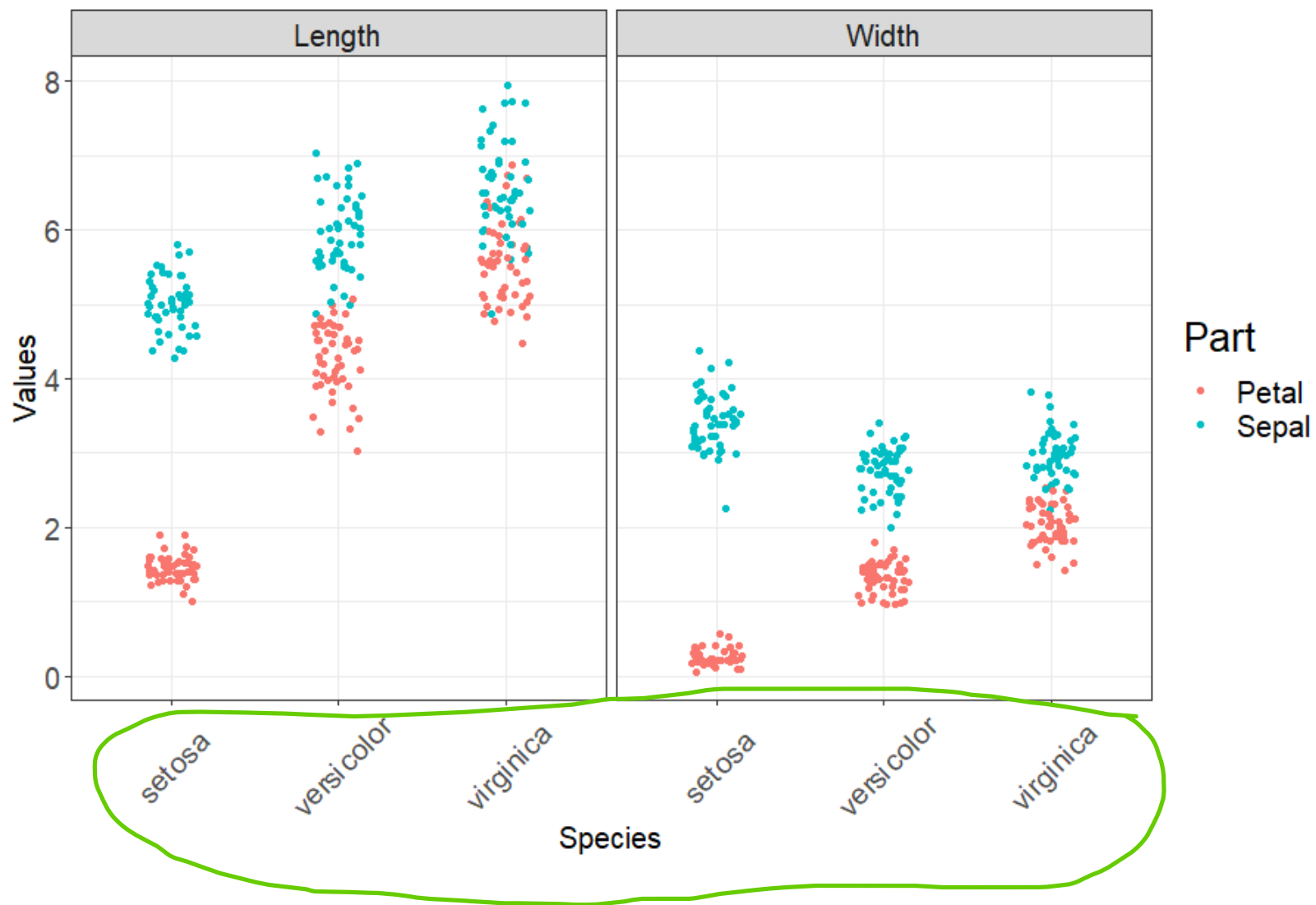


Aesthetics:



Aesthetics:

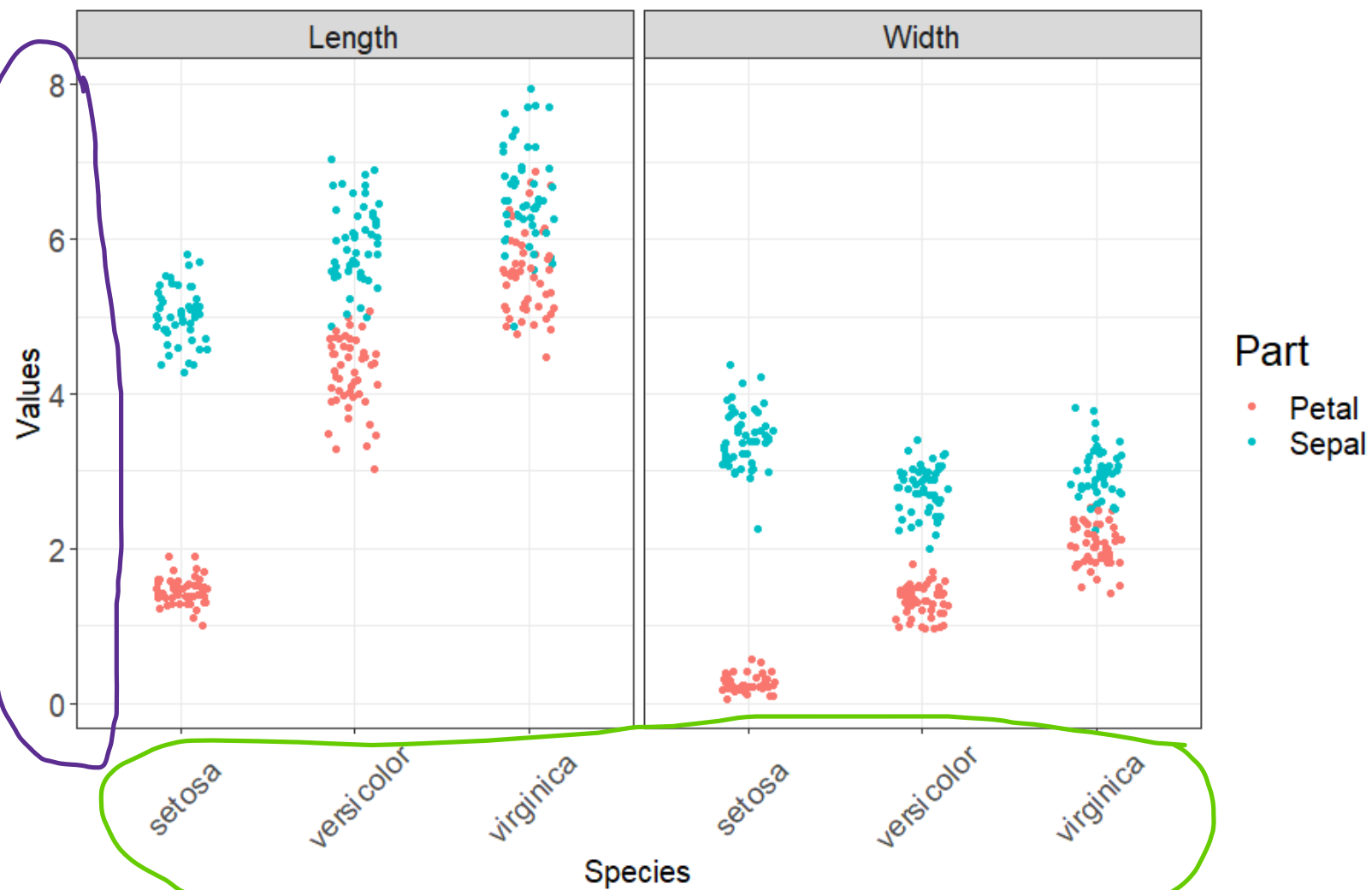
1. x axis



Aesthetics:

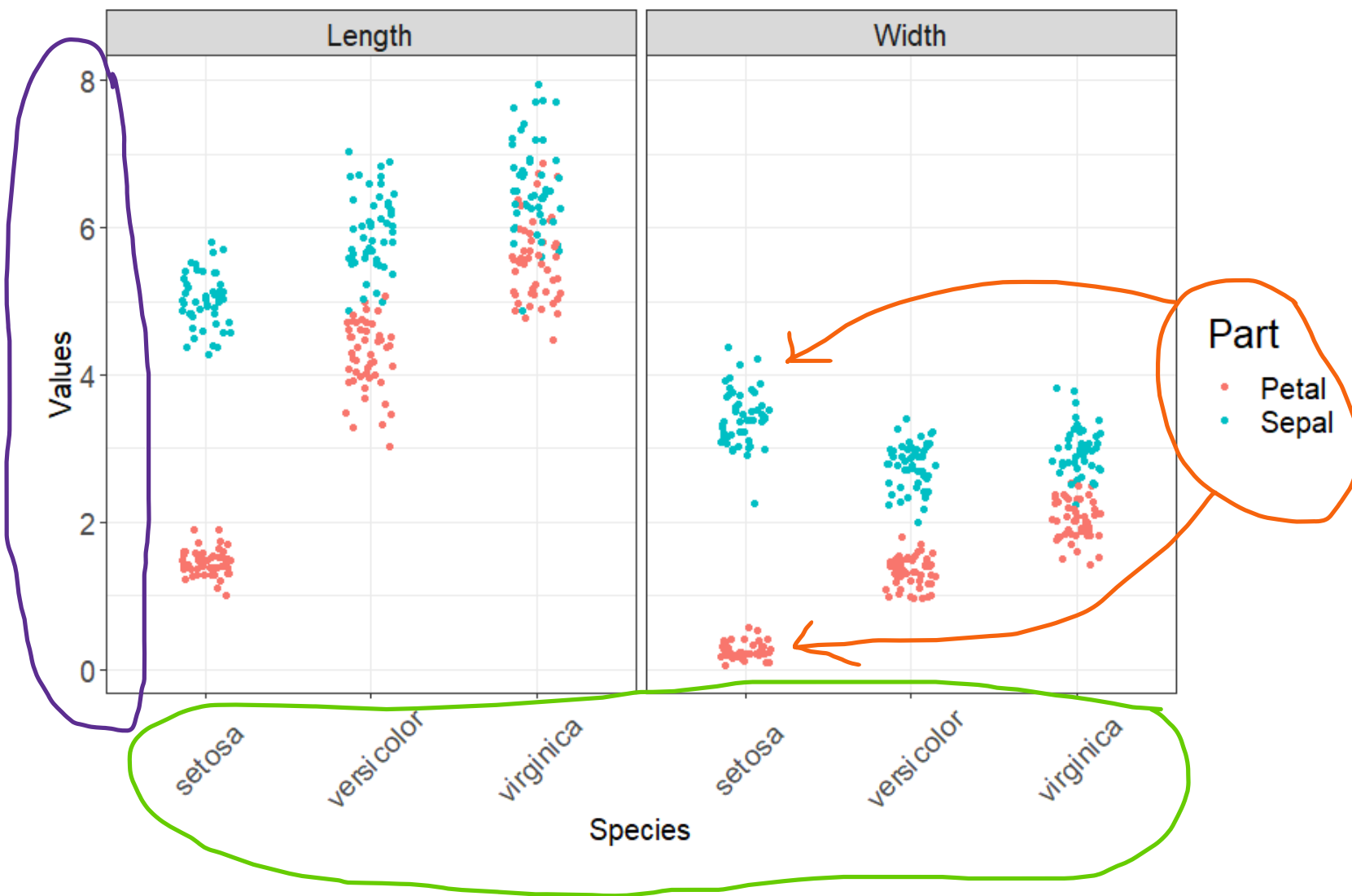
1. x axis

2. y axis



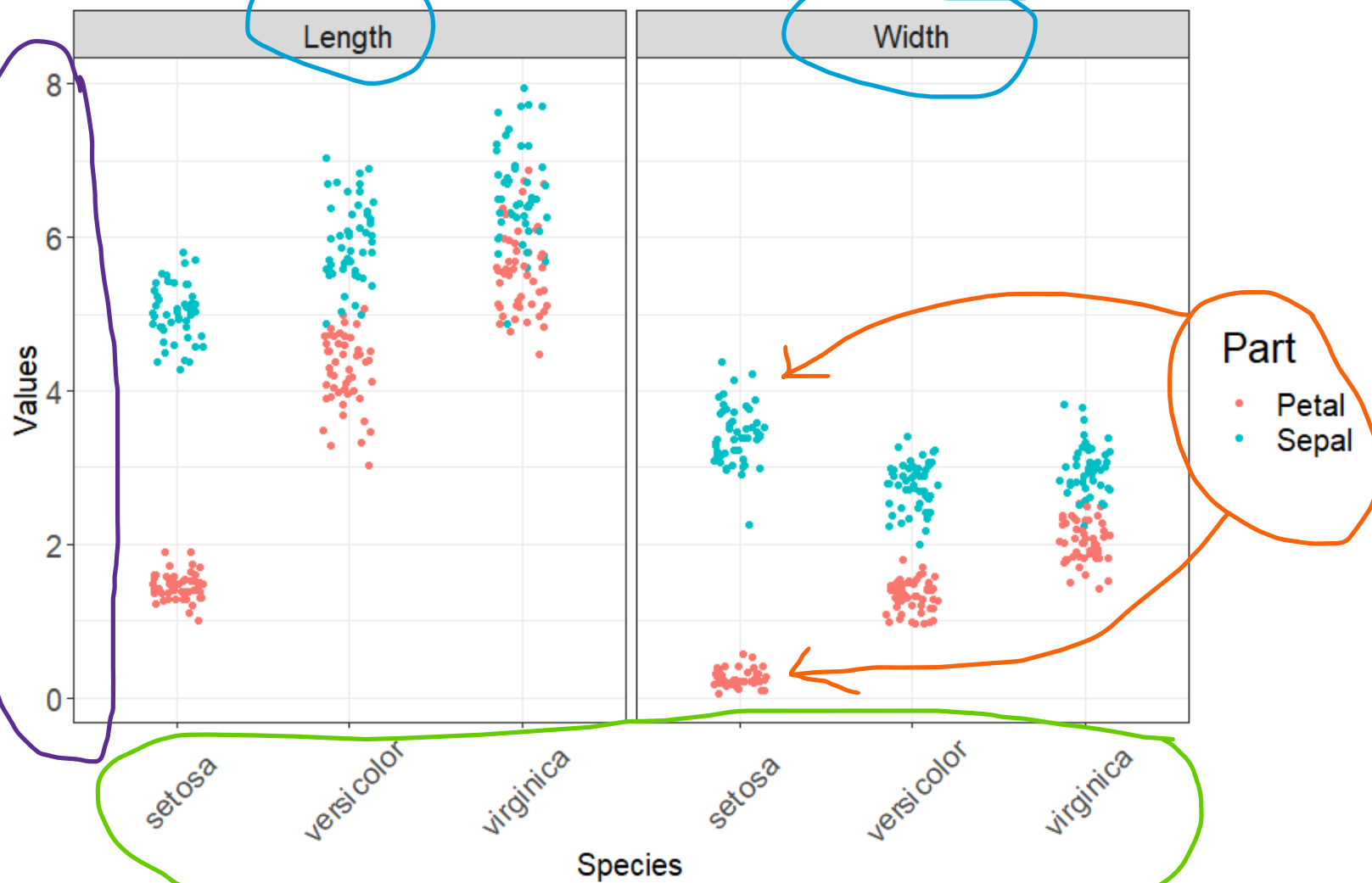
Aesthetics:

1. x axis
2. y axis
3. Color



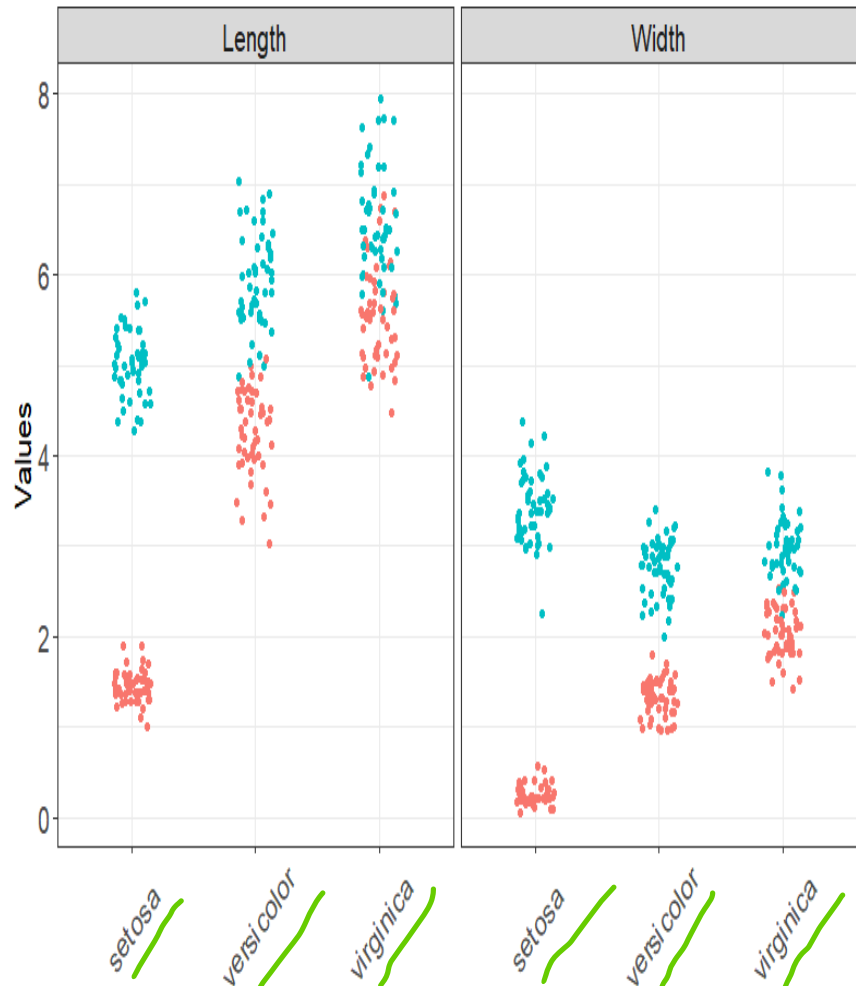
Aesthetics:

1. x axis
2. y axis
3. Color
4. Facet



```
head(iris)
```

```
##      Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 1           5.1         3.5         1.4         0.2   setosa
## 2           4.9         3.0         1.4         0.2   setosa
## 3           4.7         3.2         1.3         0.2   setosa
## 4           4.6         3.1         1.5         0.2   setosa
## 5           5.0         3.6         1.4         0.2   setosa
## 6           5.4         3.9         1.7         0.4   setosa
```



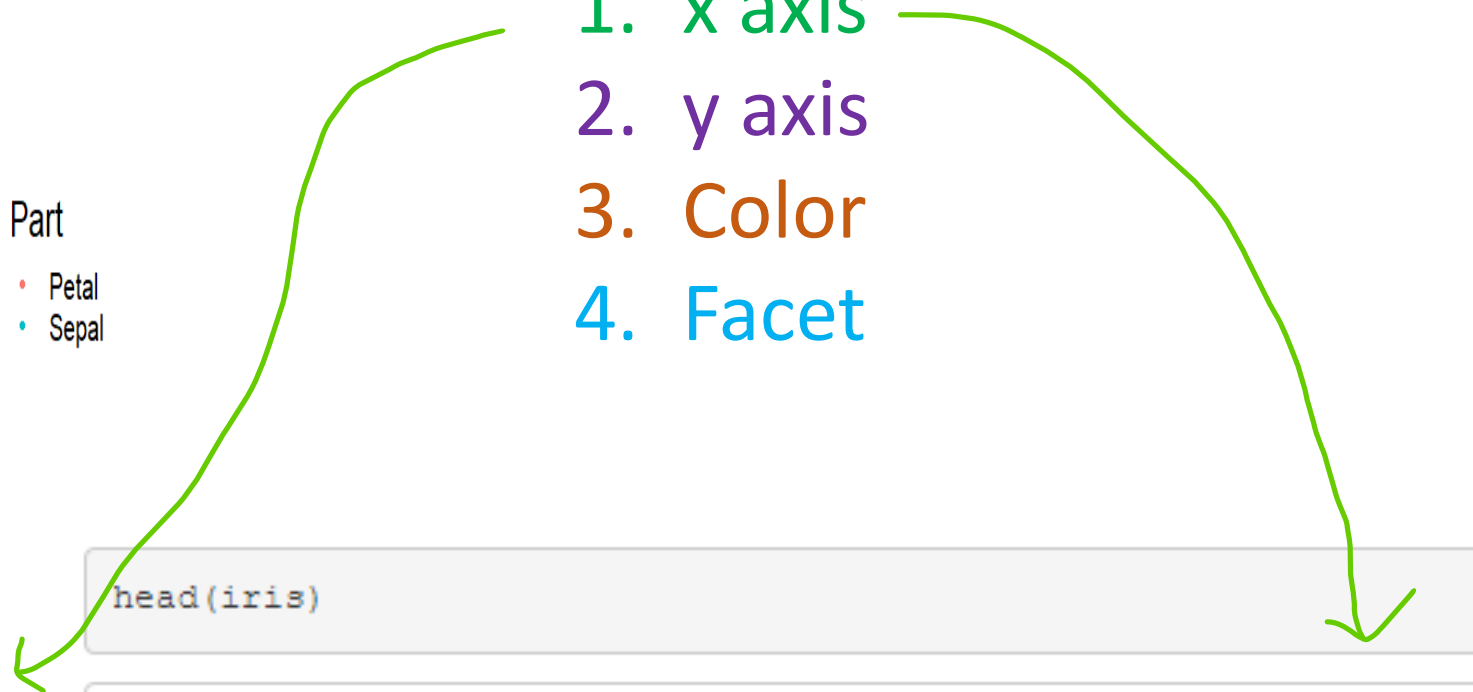
Aesthetics:

1. x axis
2. y axis
3. Color
4. Facet

Part
 • Petal
 • Sepal

```
head(iris)
```

##	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
## 1	5.1	3.5	1.4	0.2	setosa
## 2	4.9	3.0	1.4	0.2	setosa
## 3	4.7	3.2	1.3	0.2	setosa
## 4	4.6	3.1	1.5	0.2	setosa
## 5	5.0	3.6	1.4	0.2	setosa
## 6	5.4	3.9	1.7	0.4	setosa



Species

setosa
versicolor
virginica

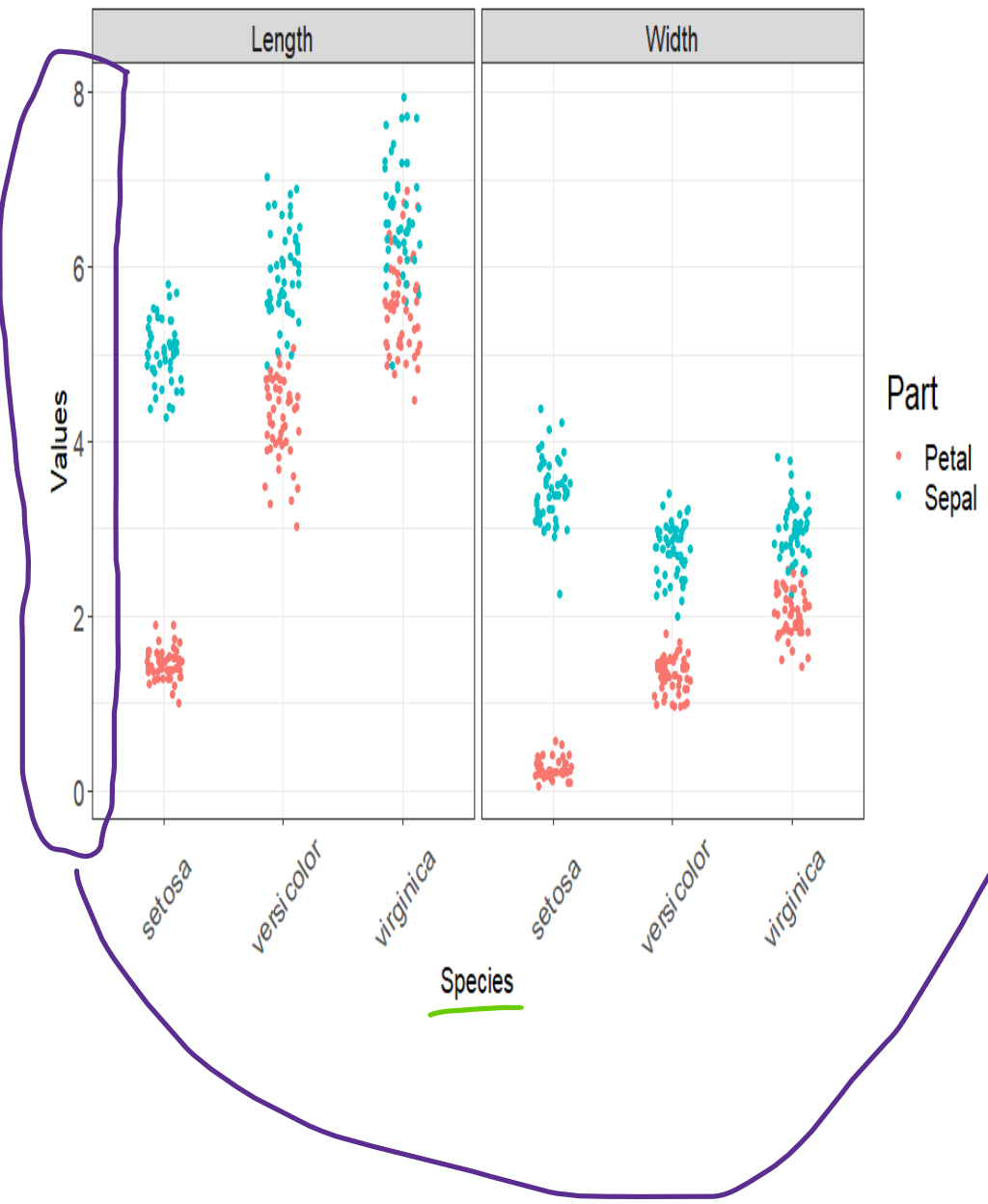
```
iris_long <- pivot_longer(iris, cols = !Species,  
                           names_to = "Part",  
                           values_to = "Values")
```

```
head(iris)
```

##	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
## 1	5.1	3.5	1.4	0.2	setosa
## 2	4.9	3.0	1.4	0.2	setosa
## 3	4.7	3.2	1.3	0.2	setosa
## 4	4.6	3.1	1.5	0.2	setosa
## 5	5.0	3.6	1.4	0.2	setosa
## 6	5.4	3.9	1.7	0.4	setosa

```
head(iris_long)
```

##	Species	Part	Values
## 1	setosa	Sepal.Length	5.1
## 2	setosa	Sepal.Width	3.5
## 3	setosa	Petal.Length	1.4
## 4	setosa	Petal.Width	0.2
## 5	setosa	Sepal.Length	4.9
## 6	setosa	Sepal.Width	3.0

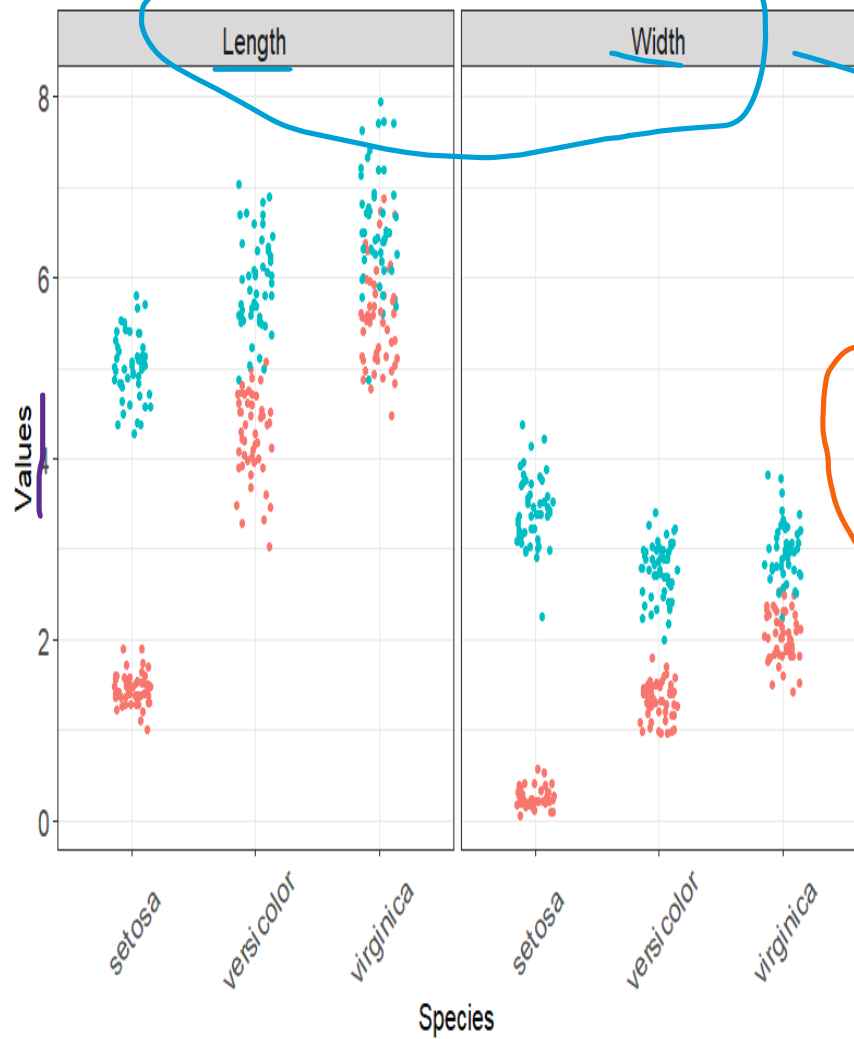


Aesthetics:

1. x axis
2. y axis
3. Color
4. Facet

```
head(iris_long)
```

##	<u>Species</u>	Part	<u>Values</u>
## 1	setosa	Sepal.Length	5.1
## 2	setosa	Sepal.Width	3.5
## 3	setosa	Petal.Length	1.4
## 4	setosa	Petal.Width	0.2
## 5	setosa	Sepal.Length	4.9
## 6	setosa	Sepal.Width	3.0



Aesthetics:

1. x axis
2. y axis
3. Color
4. Facet

```
head(iris_long)
```

##	<u>Species</u>	<u>Part</u>	<u>Values</u>
## 1	setosa	<u>Sepal.Length</u>	5.1
## 2	setosa	<u>Sepal.Width</u>	3.5
## 3	setosa	<u>Petal.Length</u>	1.4
## 4	setosa	<u>Petal.Width</u>	0.2
## 5	setosa	<u>Sepal.Length</u>	4.9
## 6	setosa	<u>Sepal.Width</u>	3.0

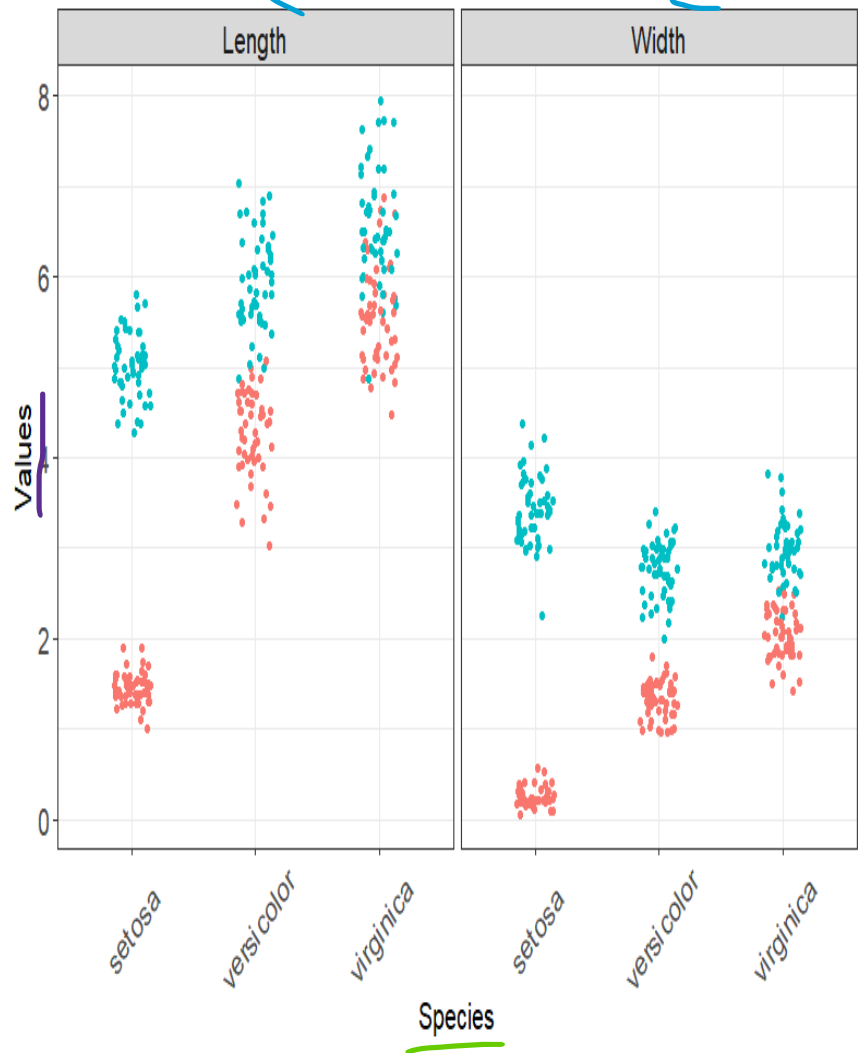
```
iris_sep <- separate(iris_long,  
  col = "Part",  
  into = c("Part", "Measurement"),  
  sep = "\\.")
```

```
head(iris_long)
```

##	Species	Part	Values
## 1	setosa	Sepal.Length	5.1
## 2	setosa	Sepal.Width	3.5
## 3	setosa	Petal.Length	1.4
## 4	setosa	Petal.Width	0.2
## 5	setosa	Sepal.Length	4.9
## 6	setosa	Sepal.Width	3.0

```
head(iris_sep)
```

##	Species	Part	Measurement	Values
## 1	setosa	Sepal	Length	5.1
## 2	setosa	Sepal	Width	3.5
## 3	setosa	Petal	Length	1.4
## 4	setosa	Petal	Width	0.2
## 5	setosa	Sepal	Length	4.9
## 6	setosa	Sepal	Width	3.0



Aesthetics:

1. x axis
2. y axis
3. Color
4. Facet

```
head(iris_sep)
```

##	<u>Species</u>	<u>Part</u>	<u>Measurement</u>	<u>Values</u>
## 1	setosa	Sepal	Length	5.1
## 2	setosa	Sepal	Width	3.5
## 3	setosa	Petal	Length	1.4
## 4	setosa	Petal	Width	0.2
## 5	setosa	Sepal	Length	4.9
## 6	setosa	Sepal	Width	3.0

```
ggplot(iris_sep, aes(Species, Values, color = Part)) +  
  geom_jitter(width = 0.15) +  
  facet_wrap(~Measurement) + theme_bw()
```

```
head(iris_sep)
```

##	Species	Part	Measurement	Values
## 1	setosa	Sepal	Length	5.1
## 2	setosa	Sepal	Width	3.5
## 3	setosa	Petal	Length	1.4
## 4	setosa	Petal	Width	0.2
## 5	setosa	Sepal	Length	4.9
## 6	setosa	Sepal	Width	3.0

