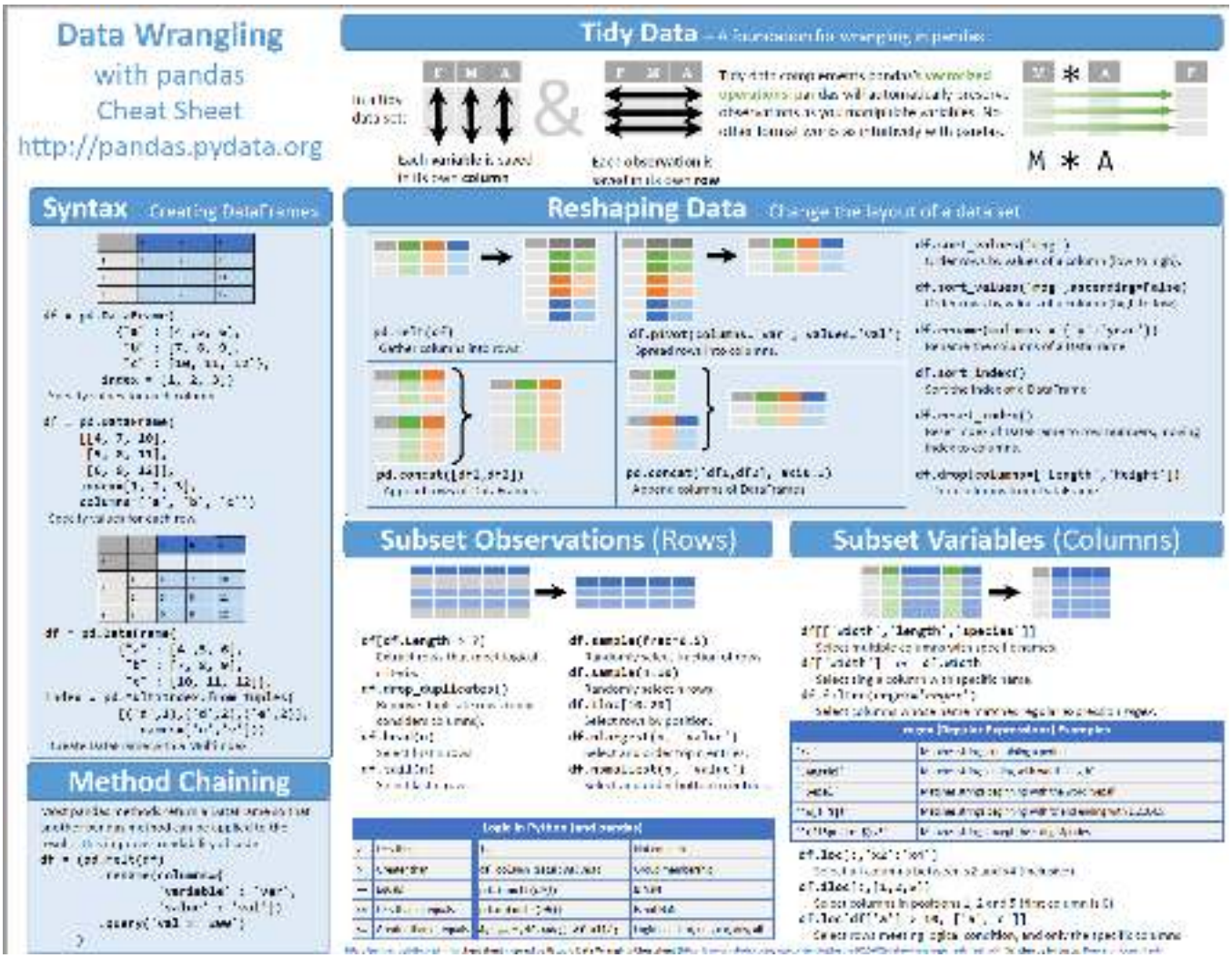
Pandas: Further Readings and Cheat Sheet

Pandas official documentation is very extensive. To make navigating through it easier, here are some good places for a broader and/or more detailed overview:

- Essential Basic Functionality
- Tutorials
- Cookbook

Below is a handy **Pandas cheat sheet**!



Summarize Data

```
df['w'].value_counts()
len(df)
df['w'].nunique()
df.describe()
```

```
sum()
count()
median()
apply(function)
min()
max()
var()
std()
```

Handling Missing Data

```
df.dropna()
df.fillna(value)
```

Make New Columns

```
df.assign(Area=lambda df: df.Length*df.Height)
df['volume'] = df.Length*df.Height*df.Depth
```

```
max(axis=1)
clip(lower=10,upper=10)
min(axis=1)
abs()
```

Group Data

```
df.groupby(by="col")
df.groupby(level="ind")
```

```
shift(1)
rank(method='dense')
rank(pct=True)
rank(ascending=False)
shift(-1)
cumsum()
cummax()
cummin()
cumprod()
```

Windows

```
df.expanding()
df.rolling(n)
```

Plotting

```
df.plot.hist()
df.plot.scatter(x='w',y='h')
```

Combine Data Sets

```
pd.merge(adf, bdf,
         how='left', on='x1')
pd.merge(adf, bdf,
         how='right', on='x1')
pd.merge(adf, bdf,
         how='inner', on='x1')
pd.merge(adf, bdf,
         how='outer', on='x1')
```

```
adf[adf.x1.isin(ydf.x1)]
adf[~adf.x1.isin(ydf.x1)]
```

```
pd.merge(ydf, zdf)
pd.merge(ydf, zdf, how='outer')
pd.merge(ydf, zdf, how='outer',
         indicator=True)
```