**Supervised Learning**

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|  | **Evaluation Metrics** | **Models** | **SkLearn Constructors** |
| Classification | mean accuracy, confusion matrix,  Sensitivity, Specificity | K-Nearest Neighbor | KNeighborsClassifier |
| Logistic Regression | LogisticRegression |
| Regression | RMSE | Linear Regression | LinearRegression |
| K-Nearest Neighbor | KNeighborsRegressor |

**http://scikit-learn.org/stable/supervised\_learning.html#supervised-learning**

**http://scikit-learn.org/stable/tutorial/machine\_learning\_map/**

**Advice on using Machine Learning:**

* Simplicity is better than complexity
* More data + simple models is better than few data and complex models
* Few good features are better than many noisy features
* Use context and domain knowledge to build and select features
* Try your best to understand the model that you are using: intuition, mathematics, optimization, loss function, parameters and algorithm.
* Learn some theory: estimation, bias, variance, optimization, regularization, complexity, random variables, etc.
* LOTS of practice with different problems.