__eq__ compares addresses of two items by default. Overrides ==.

__getitem__ gets the item at a specific key

__init__ is Python's constructor, first param is always passed in and is usually called "self"

__iter__ returns the iterable for a Python object

__next__ pops the next item off of an iterable

assert is good for pre and postconditions, bad for user input or testing

unittest is good for testing

use try and except with StopIteration exception to build a custom iterator

Mutable: List, Set

Immutable: Tuple, FrozenSet

floordiv() is like Java's integer division

def declares a function

issubclass with parameter classname checks if a class is a subclass of another class

truediv() is like Java's double division

pass is used when you have no code to put inside an if/else/try/except

Use a comma at the end of a single item tuple

Yield is used as a return inside generators

Map applies a function to all items inside of an iterable. The first parameter is the function to be applied, the second is the list that is iterable. Reduce takes a two param function and a list, and goes iterating through with a "cur" and a "next" as the first and second parameter being passed into the function. For reduce, the default is either the first value or the third parameter

Positional arguments have to go before named arguments

For parameters, you basically replace * with all the values as positional arguments, and replace ** (dict values) with named arguments

Passing in the same parameter twice into a function causes an error

Using * then ** in the function declaration can let the user pass anything into a function