Python 3.3 Cheat Sheet

Getting Started

1. Open Python IDLE
2. Create a new file
   - File > New File *Ctr + N*
3. Save the file as *filename*.py
   - you MUST add the .py
   - Do NOT name it turtle.py
4. Write your code
5. Type F5 to save and run

Turtle Graphics Setup

```
from turtle import *

# Create your pens
pen1 = Pen()
pen2 = Pen()

# Set the pen colors
pen1.color("green")
pen2.color("#336699")

# Draw
pen1.forward(100)
pen2.right(90)
pen2.fd(100)
```

Turtle Graphics Movement

```
forward(50) | fd(50)
backward(50) | bk(50) | back(50)
right(90) | rt(90)
left(180) | lt(180)
goto(0,0) | setpos(0,0) |
setposition(0,0)
setx(50)
sety(50)
home()
circle(360)
speed("fastest")
```

Note: the numbers in the parentheses mean either pixels or degrees. You can put whatever number you like

Repeat

```
for i in range(25):
      print( "Number is " str(i) )

for side in range(4):
      pen1.fd(40)
      pen1.right(90)
```

Functions

```
# Define the function
def polygon(pen, sides, length):
      pen.fd(length)
      pen.right(360 / sides)

# Call the function
polygon(pen1, 5, 75)
polygon(pen2, 4, 100)
```

Simple Interview

```
name = input("What is your name?" )
age = input("\nHow old are you? ")

print("\nYour name is " + name)
print("\nYou are " str(age) + " years old")
```

Let Python do your math

```
base = 10
height = 5
area = .5 * base * height
output = "The area of a triangle with a base of "
output += str(base) + " and height of " + str(height)
output += " is " + str(area)
print(output)
```

Credits

Chris Winikka (HundredVisions.com © 2013) with much help from...

Overview over available Turtle and Screen methods
http://docs.python.org/2/library/turtle.html