# Python Turtle Guide

A quick reference for properties and commands, grouped by function

#### 1. Appearance & Style

What it does	Command	Notes
Set turtle shape	t.shape("turtle")	Options: "arrow", "turtle", "circle", "square", "triangle", "classic"
Change turtle color	t.color("blue")	Sets both pen and fill color
Set pen and fill separately	t.color("blue", "red")	"pen color", "fill color"
Set fill color only	t.fillcolor("orange")	Used with .begin_fill() and .end_fill()
Change pen size	t.pensize(5)	In pixels
Change drawing speed	t.speed(1)	0 = instant, 1 (slowest) to 10 (fastest)
Stamp turtle shape	t.stamp()	Leaves a turtle-shaped stamp

### 2. Drawing & Pen Control

What it does	Command	Notes
Start filling a shape	t.begin_fill()	Use before drawing the shape
End filling a shape	t.end_fill()	Use after drawing the shape
Lift the pen (no drawing)	t.penup()	Turtle moves without drawing
Put the pen down (draw)	t.pendown()	Resumes drawing
Set pen color	t.pencolor("green")	Just pen line, not fill
Hide turtle icon	t.hideturtle()	Turtle still draws
Show turtle icon	t.showturtle()	Makes it visible again
Clear drawing (not position)	t.clear()	Clears the canvas
Reset turtle (full reset)	t.reset()	Clears and resets position and style

#### **3. Motion & Direction**

What it does	Command	Notes
Move forward	t.forward(100)	Moves in the current heading
Move backward	t.backward(50)	Moves opposite to heading
Turn right (clockwise)	t.right(90)	Angle in degrees
Turn left (counter-clockwise)	t.left(45)	Angle in degrees
Move to coordinates	t.goto(x, y)	Absolute position
Set direction (heading)	t.setheading(90)	0 = East, 90 = North, etc.
Face towards position	t.towards(x, y)	Returns angle to a point
Move to home (0, 0)	t.home()	Center of the screen
Circle drawing	t.circle(radius)	Positive = left, Negative = right

## 4. Positioning & Coordinates

What it does	Command	Notes
Get current position	t.pos()	Returns (x, y)
Get current heading angle	t.heading()	0–360 degrees
Check if pen is down	t.isdown()	Returns True or False
Distance to a point	t.distance(x, y)	Returns float

#### 5. Screen Control

What it does	Command	Notes
Create screen	<pre>screen = turtle.Screen()</pre>	Needed for background settings
Set background color	screen.bgcolor("skyblue")	Nice for contrast
Set screen title	screen.title("My Drawing")	Window tab title
Close on click	screen.exitonclick()	Keeps window open until click