



PYGAME MASTERY WORKSHEET

Python Refresher

Module 1 of 20 • Level ★☆☆ • Time: 40 min

SCORE

___ / 20

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Use variables, data types and operators correctly
- ✓ Write if/elif/else and match/case branching
- ✓ Use while and for loops with break/continue
- ✓ Write functions and simple classes with inheritance

QUICK RECAP

Before Pygame enters the picture, this module locks in the core Python skills every future game leans on: variables and data types, control flow, loops, functions and scope, and object-oriented programming — classes, objects, inheritance and polymorphism.

Section A · Concept Check • BEGINNER 4 × 1 = 4 _____

- 1 What does `input()` always return?
 - ☐ A. int
 - ☐ B. str
 - ☐ C. bool
 - ☐ D. float
- 2 Which loop is guaranteed to run a fixed number of times?
 - ☐ A. while True
 - ☐ B. for i in range(n)
 - ☐ C. if/else
 - ☐ D. match/case
- 3 What keyword sends a value back from a function?
 - ☐ A. return
 - ☐ B. yield only
 - ☐ C. break
 - ☐ D. pass
- 4 In a class method, what does `self` refer to?
 - ☐ A. The class name
 - ☐ B. The specific object the method was called on
 - ☐ C. A global variable
 - ☐ D. Nothing, it's optional

Section B · Problem Solving • INTERMEDIATE 2 + 3×3 = 11 _____

- 5 The comparison operator for "equal to" is _____ (two characters).
- 6 The loop keyword that skips straight to the next iteration is _____.
- 7 Write a one-line if/else expression (conditional expression) that sets `label = "Win"` if `score >= 100` else "Try Again".

- 8 What is the difference between a `while` loop and a `for i in range(n)` loop?

- 9 Name the class method Python calls automatically when you create a new object.

Section C · Challenge • CHALLENGE 5 _____

- 10 A game loop is a `while` loop that runs "forever". Explain in your own words why a game needs a loop shaped this way instead of code that just runs once from top to bottom.

🌱 Reflection — the most useful thing I learned:

A ___/4 B ___/11 C ___/5 **Total ___/20**

Teacher's Signature

Parent's Signature

⌘ ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-B 2-B 3-A 4-B | 5 = 6 continue 7 = label = "Win" if score $\geq$ 100 else "Try Again" 8
= while repeats until a condition becomes false (unknown iteration count); for+range repeats an
exact, known number of times 9 = __init__ | 10 = A game must keep checking input/updating/drawing
every single frame indefinitely until the player quits, which is exactly what a repeating loop does —
running once top-to-bottom would only show a single static frame

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