

Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Simulate gravity ✓ Jump on key press ✓ Land on platforms ✓ Side-scrolling basics

 Section A • Concept Check • BEGINNER $4 \times 1 = 4$ _____

- 1** Gravity means constantly:

☐ A. change y by negative ☐ B. change x by 10

☐ C. turn 15 ☐ D. hide

2 Jumping changes:

☐ A. y upward briefly ☐ B. x only

☐ C. costume only ☐ D. backdrop
- 3** Landing is detected with:

☐ A. touching platform ? ☐ B. loudness

☐ C. answer ☐ D. timer

4 If falling and touching platform, set:

☐ A. y-speed to 0 ☐ B. score to 0 ☐ C. size to 0

☐ D. x to 0

 Section B • Problem Solving • INTERMEDIATE $2 + 3 \times 3 = 11$ _____

- 5** Gravity: change y by _____ each frame.
- 6** Jump uses the _____ key usually.
- 7** Write simple gravity for the player.
- _____
- 8** Jump when space is pressed (only on ground).
- _____
- 9** Why use a y-speed variable instead of fixed jumps?
- _____

 Section C • Challenge • CHALLENGE 5 _____

- 10** What happens when the player falls off the platforms?
- _____

 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-A 2-A 3-A 4-A | 5 a negative number 6 space/up 7 = forever [change y-speed by -1; change y by y-speed; if touching ground: set y-speed 0] 8 = if touching ground and space pressed: set y-speed to 12 9 = It makes natural accelerating/decelerating motion | 10 = Reset to the start position (lose a life)

