

Name: _____ **Date:** _____

Nail Kindergarten Computer Logic Creation

Synthesize pattern recognition and complex logic building through hands-on algorithm construction. A rigorous extension for young learners ready for multi-step reasoning.

1. If you are designing a robot to brush its teeth, which step must happen BEFORE the robot starts scrubbing?

- A. Rinse the toothbrush
- B. Put toothpaste on the brush
- C. Smile in the mirror
- D. Put the brush away

2. To make a character dance forever without stopping, a programmer needs to use a Loop.

- A. True
- B. False

3. A robot sees a puddle. The programmer says: '___ there is water, then jump over it.' What word starts this decision?

- A. Wait
- B. If
- C. Stop
- D. Go

4. You want to store a 'Secret Color' in your program to use later. Which programming tool acts like a labeled box to hold this info?

- A. A Bug
- B. A Screen
- C. A Variable
- D. A Button

5. Imagine a 'Function' named WIGGLE that makes a sprite shake twice. To use it three times, a smart programmer would use a ___.

- A. Variable
- B. Loop
- C. Keyboard
- D. Mouse

6. A programmer must write a NEW function every single time they want a character to jump, even if the jump is exactly the same.

- A. True
- B. False

Name: _____ **Date:** _____

7. A robot is walking. If the light is RED, it stops. If the light is GREEN, it walks. What is this type of logic called?

- A. Conditionals
- B. Counting
- C. Variables
- D. Scrolling

8. An algorithm is like a ____ for a computer. It tells it exactly which steps to follow in the right order.

- A. Story
- B. Picture
- C. Recipe
- D. Game

9. In a game, the 'Score' is an example of a Variable because the number changes as you play.

- A. True
- B. False

10. Which set of instructions would create a square? (Assume each step is followed by a 90-degree turn).

- A. Move forward 3 times
- B. Loop 'Move forward' 4 times
- C. Move forward, then stop
- D. Loop 'Move forward' 2 times