Name: _____   **Date:** _____

Answer Key: A Robot's Morning Routine: 2nd Grade Coding Magic Quiz

Solve 10 logic-building puzzles to help a digital friend prepare its breakfast using variables, loops, and basic commands.

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1. A robot wants to know how many toys you have. Which of these acts like a 'label' on a box to keep track of that number?

Answer: A) A Variable

> Variables are like containers or labels that hold information, like the number of toys, so the computer can remember it.

2. If you want a robot to brush its teeth 10 times without telling it 'brush' 10 times, you should use a _____.

Answer: B) Loop

> A loop is a programming tool that repeats a set of instructions many times automatically.

3. True or False: A computer uses 'Conditionals' to make choices, like 'IF it is raining, THEN use an umbrella.'

Answer: A) True

> Conditionals are 'if-then' statements that let computers decide what to do based on a rule.

4. You have a big block of code that draws a star. You give it a name like 'Draw_Star' so you can use it again later. What is this called?

Answer: C) A Function

> A function is a saved set of instructions that you can call by name whenever you need to do that specific task.

5. True or False: Computers need instructions in a specific order to work correctly.

Answer: A) True

> The order of steps, or sequence, is very important in programming so the computer understands what to do first.

6. In a game, your 'health' is 100. When you get hit, the health number changes. This changing number is stored in a _____.

Answer: B) Variable

A variable stores information that can change, like a player's health or score in a game.

7. Which of these is a real-life example of a LOOP?

Answer: C) Pedaling a bike over and over

Pedaling is a repeating action, just like a loop in a computer program.

8. When a coder finds a mistake in their instructions and fixes it, they are _____.

Answer: A) Debugging

Debugging is the process of looking for errors (bugs) and fixing them so the program runs right.

9. True or False: A function is a block of code that can only be used one time.

Answer: B) False

Functions are designed to be reusable so you don't have to write the same code multiple times.

10. If a robot has the rule: 'IF hungry, THEN eat,' what happens if the robot is NOT hungry?

Answer: B) It does nothing

In a simple conditional, if the condition ('hungry') isn't met, the robot skips the action.