Name: _____   Date: _____

Blast Busy Bot Barriers: Pre-K Problem Solving Quiz

Design efficient pathways and fix broken routines to help robots navigate tricky obstacles through high-level logical reasoning.

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1. A robot needs to reach a battery. One path is short but has a puddle (which breaks robots!). The long path is dry. Which path should the robot choose to succeed?

    A.   The short path through the water

    B.   The long, dry path

    C.   Neither path

    D.   Stay still until it runs out of power

2. A robot is trying to build a tower. It keeps falling over. The robot should _____ the problem to see if the bottom block is too small.

    A.   Ignore

    B.   Analyze

    C.   Hide

    D.   Forget

3. If a robot must pick up a ball and then drop it in a box, it doesn't matter if it tries to drop the ball before picking it up.

    A.   True

    B.   False

4. A robot gardener has three steps: 1. Dig hole, 2. Put seed in, 3. Water. If the robot misses step 2, what happens?

    A.   A flower grows instantly

    B.   The robot gets tired

    C.   Nothing grows because a step is missing

    D.   The robot starts singing

5. When a robot finds a wall in its path, it must _____ its plan to find a way around.

    A.   Sleep

    B.   Cry

    C.   Change

    D.   Stop

6. A robot can finish its work faster if it skips important steps like 'Open Door'.

    A.   True

    B.   False

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7. Two robots are cleaning. Robot A picks up toys one by one. Robot B uses a big bin to scoop them all at once. Which robot is more efficient?

    A. Robot A

    B. Robot B

    C. Neither

    D. Both are the same

8. If a robot is stuck spinning in circles, there is a _____ in its instructions that needs fixing.

    A. Bug

    B. Friend

    C. Cookie

    D. Hat

9. To paint a whole house, it is helpful to break the job into small parts, like 'Paint the Door' and 'Paint the Window'.

    A. True

    B. False

10. A robot chef wants to make toast. It has: 1. Put bread in toaster, 2. Take toast out, 3. Push button down. What is wrong with this order?

    A. Nothing is wrong

    B. It should eat the bread first

    C. It needs to push the button before taking the toast out

    D. The robot should use a microwave