

Pizza Party Logic: Kindergarten Algorithm Architects Quiz

Create and troubleshoot multi-step sequences for real-world tasks to demonstrate high-level procedural decomposition and error correction.

1. You are building a robot to help a gardener. If the robot must plant a seed, which step has to happen BEFORE the robot pours water?

- A. Put away the watering can
- B. Dig a hole and drop the seed in
- C. Watch the flower grow tall
- D. Pick the vegetables to eat

2. You are making a 'Morning Routine' algorithm. 1. Get out of bed. 2. Put on clothes. 3. _____. 4. Go to school. What is the best missing step?

- A. Brush your teeth
- B. Go to sleep
- C. Do your homework
- D. Take off your shoes

3. If your algorithm for making a sandwich says 'Put jelly on top of the bread' and you don't have bread, the algorithm will still work perfectly.

- A. True
- B. False

4. You want to draw a smiley face. Which sequence of steps is in the correct logical order?

- A. Draw a mouth, then throw away the paper, then draw eyes.
- B. Draw a big circle, then draw two eyes and a mouth inside it.
- C. Color the whole paper black, then draw a yellow circle.
- D. Put the cap on the marker, then start drawing circles.

5. Decomposition means taking a big job, like cleaning a giant playroom, and breaking it into tiny jobs like 'pick up the legos'.

- A. True
- B. False

6. Your algorithm for an ice cream sundae is: 1. Get a bowl. 2. Add ice cream. 3. Add sprinkles. 4. Eat! What happens if you skip step 2?

- A. You eat a bowl of sprinkles
- B. The ice cream tastes better
- C. The bowl disappears
- D. The recipe is finished faster

Name: _____

Date: _____

7. To build a tall block tower that doesn't fall, which 'rule' should be in your building algorithm?

- A. Use the smallest blocks at the very bottom.
- B. Put the heavy, wide blocks at the bottom first.
- C. Only use one block for the whole tower.
- D. Close your eyes while placing blocks.

8. You are 'debugging' a dance. The music says CLAP, but the dancer is KICKING. What should the dancer do to fix the bug?

- A. Keep kicking harder
- B. Stop the music forever
- C. Change the kicking step to a clap
- D. Sit down and take a nap

9. An algorithm is only for computers; it can never be used for real-life things like washing your hands.

- A. True
- B. False

10. You are designing a path for a bee to get to a flower. There is a spider web in the way. What is the smartest way to design the algorithm?

- A. Fly straight into the web.
- B. Wait for the spider to go away.
- C. Add a step to 'Turn Left' and 'Fly Around' the web.
- D. Tell the bee to walk on the ground.