

Name: _____ Date: _____

When Robots Join Our Classroom: A Kindergarten AI Design Lab

Synthesize knowledge of sensor input and decision-making to design and evaluate how helpful machines process information in a school environment.

1. If you want to build a robot that helps put away toys, what is the FIRST thing the robot needs to 'see' using its camera?

- A. What the weather is like outside
- B. The difference between a toy and a shoe
- C. How many stars are in the sky
- D. The color of your teacher's favorite mug

2. True or False: If we give a robot a thousand pictures of kittens, it will eventually understand how to bark like a dog.

- A. True
- B. False

3. Imagine an AI that helps a chef. To make a 'decision' to stop cooking, the AI needs to check a ____.

- A. Crayon
- B. Sensor for heat
- C. Picture of a flower
- D. Music player

4. You are teaching a robot to recognize a 'Circle.' If the robot thinks a square is a circle, what is the best way to help it learn?

- A. Turn the robot off and go to recess
- B. Hide all the squares in the room
- C. Show it many more examples of circles and tell it 'No' for the square
- D. Paint the robot a different color

5. True or False: A robot that plays music when it hears you clap is using its 'ears' (microphone) as a sensor to start an action.

- A. True
- B. False

6. When a robot learns to move through a maze without hitting walls, it is practicing ____.

- A. Sleeping
- B. Problem-solving
- C. Eating lunch
- D. Singing songs

Name: _____

Date: _____

7. If we want an AI to create a beautiful new drawing of an 'Alien,' what does it need to see first?

- A. Only one picture of an apple
- B. Nothing, robots imagine things like humans do
- C. Thousands of drawings of space and creatures
- D. A bowl of soup

8. True or False: An AI can feel 'happy' or 'sad' just like a person when it finishes a job.

- A. True
- B. False

9. A smart fridge that tells you when the milk is gone is using ___ to help your family.

- A. Magic
- B. Data and patterns
- C. A hidden person
- D. A telescope

10. Why would a robot guard dog need to know the difference between 'the mailman' and 'a squirrel'?

- A. So it knows whether to bark or ignore them
- B. So it can learn how to climb trees
- C. Because squirrels like to read letters
- D. To help it find its charger