

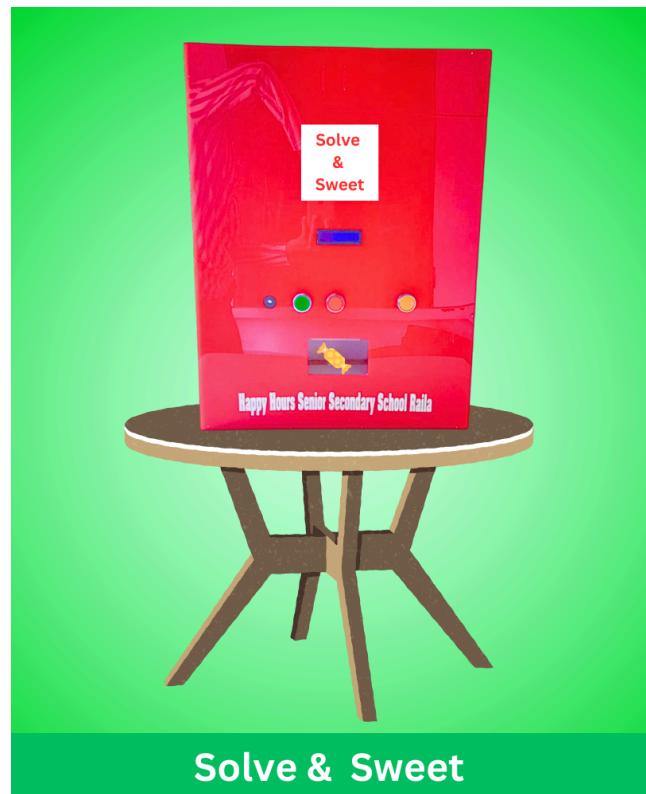
# 1. Solve & Sweet - Math Quiz Candy Machine Manual

## Introduction

The **Solve & Sweet** Math Quiz Candy Machine is an interactive learning tool designed to make learning math fun and rewarding. Answer two quiz questions correctly, and get a candy as a reward!

## How It Works

- Powering On:** Turn on the machine using the power button. The display will show a welcome message and instructions.
- Starting the Quiz:** The first question will be displayed automatically.
- Answering Questions:**
  - Read the question on the display.
  - Press the **Green Button** for "True."
  - Press the **Red Button** for "False."
  - A **buzzer will beep** when an answer is captured.
- Time Limit:** You have **15 seconds** to answer each question. If no answer is given within the time limit, it will be considered incorrect.
- Next Question:** After answering the first question, the second question will be displayed.
- Quiz Completion & Scoring:**
  - If **both answers** are correct, the machine will dispense a **candy** as a reward.
  - If **any answer** is incorrect, no candy will be dispensed.
- Restarting the Quiz:**
  - Press the **Yellow Button** to restart a new quiz session.
  - A new set of questions will be displayed.



# Machine Components

- **Display Screen:** Shows questions and results.
- **Green Button:** Selects "True" as an answer.
- **Red Button:** Selects "False" as an answer.
- **Yellow Button:** Restarts the quiz.
- **Candy Dispenser:** Releases a candy when both answers are correct.
- **Timer System:** Ensures each question has a **15-second response time**.
- **Buzzer:** Beeps when an answer is captured.

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## Notes & Guidelines

- Ensure the machine is powered properly before use.
- Answer each question within **15 seconds**.
- Press the correct buttons firmly to register your answer.
- Restart the quiz anytime using the **Yellow Button**.
- Keep the candy dispenser stocked for continuous fun!

Enjoy learning with **Solve & Sweet!**

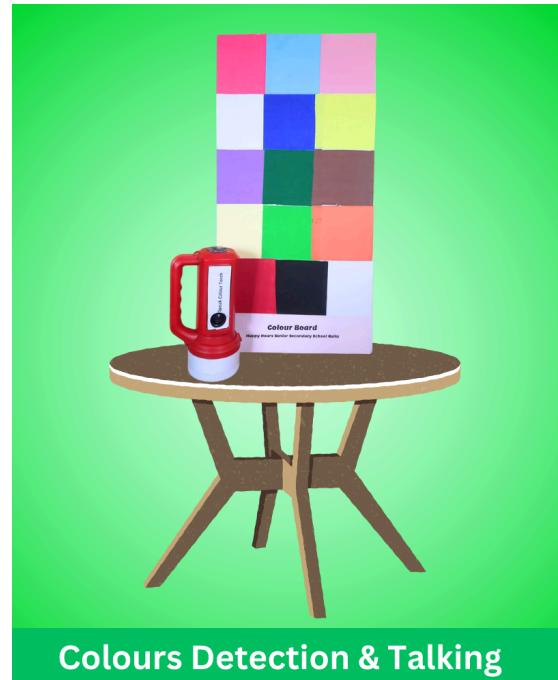
# 2. Colours Detection & Talking Machine Manual

## Introduction

The **Colours Detection & Talking Machine** is an innovative tool designed to help users identify and learn colors interactively. When the torch is placed near any color, the machine detects it, displays the color name on the OLED screen, and speaks the color name aloud.

## How It Works

1. **Power On:** Turn on the torch using the **On/Off switch**.
2. **Detecting Colors:**
  - Place the torch sensor near any color on the provided color board or any external surface.
  - The **RGB color sensor** detects the color.
3. **Displaying & Speaking:**
  - The detected color name appears on the **OLED display**.
  - The **Speaker** announces the color name aloud.
4. **Charging the Device:**
  - The device is powered by a rechargeable **cell**.
  - Use the **Type-C charging port** to charge the torch when needed.
5. **Sample Colors Board:**



- A color board with **14 sample colors** is included for reference and practice.

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## Components of the Torch

- **OLED Display:** Shows the detected color name.
- **Speaker:** Announces the detected color.
- **RGB Color Sensor:** Detects and identifies colors.
- **NodeMCU:** Processes color data and controls the display & speaker.
- **Rechargeable Cell:** Provides power to the device.
- **On/Off Switch:** Turns the torch on and off.
- **Type-C Charging Port:** Allows for easy recharging of the device.

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## Notes & Guidelines

- Ensure the **sensor is clean** for accurate color detection.
- Place the **torch close** to the color surface for best results.
- Charge the device **regularly** for uninterrupted usage.
- The **14-color sample board** helps in learning different color names.
- Don't use on direct sunlight environment

Enjoy learning and exploring colors with the **Colours Detection & Talking Machine!**

# 4. QnA VoiceBot Manual

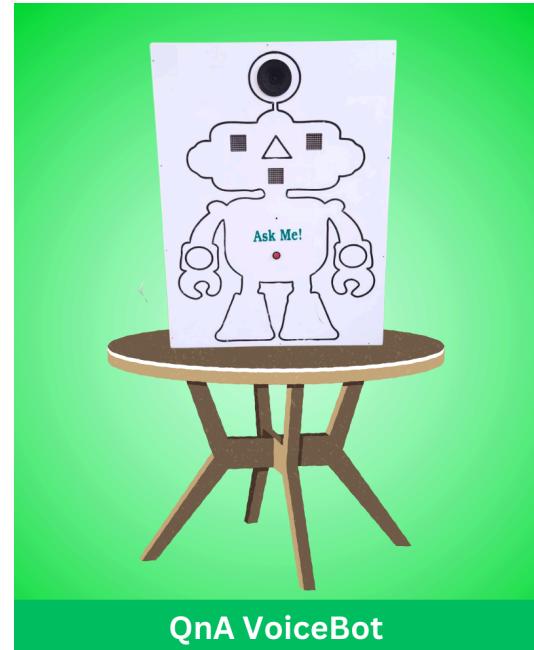
## Introduction

The **QnA VoiceBot** is an interactive voice-based question-answering machine. Users can press the '**Ask Me**' button to ask a question, and the bot will respond with the correct answer. The machine is Wi-Fi-enabled and requires an internet connection for processing queries.

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## How It Works

1. **Power On:** Ensure the machine is powered on and connected to Wi-Fi.
2. **Connecting to Wi-Fi:**
  - Create a **hotspot** with the following details:
    - **SSID:** Jai Shri Ram
    - **Password:** **jsk12345**
  - The bot will connect automatically when the correct hotspot is available.
3. **Asking a Question:**
  - Press the '**Ask Me**' button.
  - The machine will prompt, "**Please ask**".
  - You have **3 seconds** to ask your question.
4. **Receiving an Answer:**
  - If the question is detected within **3 seconds**, the machine will process it and **speak the answer aloud**.



- If no question is detected, the bot will not respond.

5. **Repeat as Needed:** Press the 'Ask Me' button again to ask another question.

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## Features

- **Voice Recognition:** Detects and understands spoken questions.
- **Speaker Output:** Clearly speaks the answers aloud.
- **Wi-Fi Connectivity:** Requires an internet connection to process questions.
- **Easy-to-Use Button:** Simple one-button operation.
- **Fast Response:** Answers within seconds of detecting a question.

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## Notes & Guidelines

- Ensure the **Wi-Fi hotspot** is active and connected before using the machine.
- Speak **clearly and within 3 seconds** after pressing the button.
- The machine only works **while connected to the internet**.
- If the machine does not respond, check the **Wi-Fi connection** and **restart the device**.

Enjoy interactive learning with the **QnA VoiceBot!**

## Conclusion:

The QnA VoiceBot is an interactive voice assistant that answers questions when the user presses the "**Ask Me**" button and speaks within **3 seconds**. It connects to WiFi via the "**Jai Shri Ram**" hotspot, allowing seamless voice-based interaction. This machine is useful for educational, informational, and interactive applications.

## **Advantages:**

- Easy to Use** – Press a button, ask a question, and get an answer.
- Voice-Based Learning** – Enhances engagement for students and general users.
- Standalone WiFi Connectivity** – Works without an external internet connection.
- Quick Response Time** – Answers within seconds.
- Customizable** – Can be expanded with more Q&A data.

# 5. Body Part Talker User Manual

## Introduction

The **Body Part Talker** is an interactive learning device designed to help users identify human body parts in both **English and Hindi**. It uses a **sensor shaped like a doctor's stethoscope** to detect body parts and provides **voice feedback** with the correct name.

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## Features

- **Touch and Speak Functionality:** Simply place the **sensor** on any body part image on the board, and the machine will speak its name.
- **Dual Language Support:** The machine announces the body part names in **both English and Hindi**.
- **Interactive Learning:** Helps children and learners easily recognize body parts with **audio reinforcement**.

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## How to Use

### Step 1: Power On

1. Connect the machine to a power source.
2. Wait for the system to initialize (a welcome message may be played).

### Step 2: Using the Sensor

1. Take the **stethoscope-shaped sensor** and gently place it on any body part shown on the board.
2. Hold the sensor steady for **1-2 seconds**.

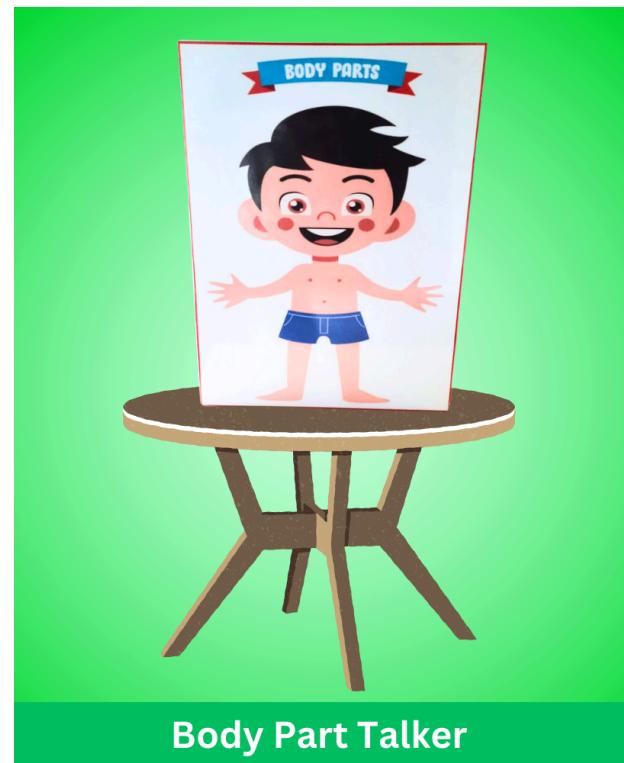
### Step 3: Listening to the Name

1. The machine will detect the body part and announce its name in **English** first.
2. After a short pause, it will repeat the name in **Hindi**.

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### Example Body Parts & Voice Output

Body Part	English Name	Hindi Name
Head	Head	सिर (Sir)
Hand	Hand	हाथ (Haath)
Leg	Leg	पैर (Pair)
Eye	Eye	आँख (Aankh)
Ear	Ear	कान (Kaan)



### Tips for Best Performance

- Ensure the **sensor touches the correct area** on the board.
- **Do not move the sensor too quickly**, as the machine needs time to detect the body part.
- Use in a **quiet environment** to hear the voice clearly.

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## Troubleshooting

Issue	Solution
No sound	Check if the power is on and the speaker is working.
Incorrect body part name	Ensure the sensor is placed properly on the image.
Voice not clear	Use the machine in a quiet place or check speaker volume.

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## Conclusion

The **Body Part Talker** is a fun and educational tool for learning human anatomy. Whether for kids, students, or beginners, it provides an engaging experience with **real-time voice guidance**. Happy learning!

For any further support, please contact us.

# 5. Card Talker Machine - User Manual

## 1. Introduction

The **Card Talker** is an **interactive learning machine** designed to teach children about different objects, such as **shapes, vegetables, flowers, and more**, using **RFID technology**. When an RFID card is placed near the machine, it **speaks the object's name in both Hindi and English** while displaying **animated LED facial expressions**.

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## 2. Features

**✓ Dual-Language Support** – Speaks in **Hindi & English** **✓ RFID-Based Recognition** – Simply **tap the card**, and the machine recognizes it **✓ Animated LED Expressions** – Eyes and mouth light up for engagement **✓ Multiple Learning Categories** – Shapes, vegetables, flowers, etc. **✓ Fun & Interactive** – Encourages **play-based learning** **✓ Customizable & Expandable** – More cards can be added

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## 3. Package Contents

- **1x Card Talker Machine**
- **10x RFID Learning Cards** (Shapes, Vegetables, Flowers, etc.)
- **1x Power Adapter**
- **1x Instruction Manual**

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## 4. How to Use

### Step 1: Power On

1. Connect the **power adapter** to the machine.



2. Turn on the switch; the LED indicators will light up.

## Step 2: Tap an RFID Card

1. Hold an **RFID learning card** near the scanner area.
2. The machine will **detect** the card and **speak the object's name**.
3. The machine will also display **animated facial expressions** using LEDs.

## Step 3: Continue Learning

- Repeat the process with **different RFID cards**.
- Enjoy learning new words in **both Hindi and English!**

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## 5. RFID Learning Categories

The **Card Talker** machine supports multiple **learning categories**:

1. **Shapes** (Circle, Square, Triangle, etc.)
2. **Vegetables** (Tomato, Carrot, Potato, etc.)
3. **Flowers** (Rose, Sunflower, Lotus, etc.)
4. **Fruits** (Apple, Mango, Banana, etc.)
5. **Animals** (Cat, Dog, Elephant, etc.)

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## 6. Troubleshooting Guide

Issue	Solution

Machine is not turning on	Check the power adapter and switch
RFID card not recognized	Ensure the card is placed correctly near the scanner
No sound output	Check the speaker connection and volume settings
LED animation not working	Ensure the LED module is properly connected

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## 7. Safety Instructions

- Do not expose the machine to **water or extreme heat**.
- Keep **RFID cards away from magnets** to prevent damage.
- Use only the provided **power adapter** to avoid electrical issues.
- Store RFID cards in a **safe and dry place**.

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## 8. Future Upgrades

- More **RFID learning cards** can be added to **expand vocabulary**.
- Custom **voices and languages** can be integrated.

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## 9. Conclusion

The **Card Talker Machine** is a fun and engaging way to help children **learn through play**. Its **interactive features, voice feedback, and animations** make learning enjoyable while reinforcing **Hindi and English vocabulary**. Perfect for **schools, preschools, and home learning setups**.

# 6. Glow & Count Machine Manual

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## 1. Introduction

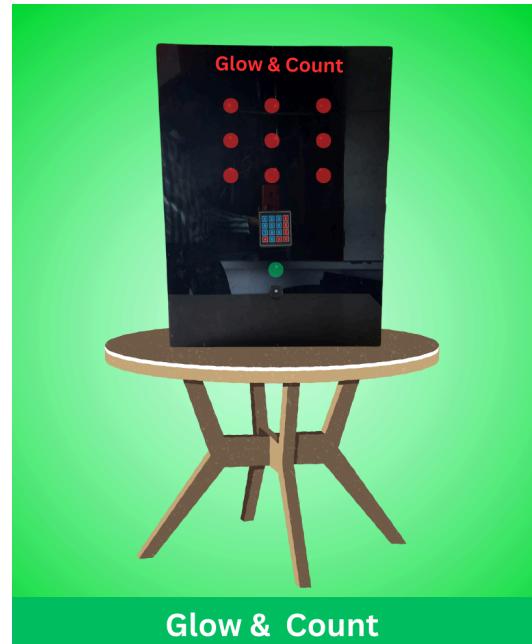
The **Glow & Count Machine** is an interactive learning device designed to help users count and recognize numbers using LED lights, a keypad, and a buzzer. It features two modes: **Normal Mode** and **Quiz Mode**.

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## 2. Components

- **9 LEDs** (for number display)
- **1 Keypad** (buttons 0-9, \* and #)
- **1 Buzzer** (for audio feedback)
- **1 Indicator LED** (for quiz mode results)

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## 3. How to Use

### Power On

- Turn on the machine. It will initialize and be ready for use.

### Normal Mode

- Press any number key (1-9) on the keypad.
- The machine will light up the corresponding number of LEDs.
- The buzzer will beep the same number of times as the selected number.
  - Example: Pressing '5' will light up 5 LEDs and beep 5 times.

- Press another number to change the LED count accordingly.

### **Quiz Mode**

- Press the “\*” button to start the quiz mode.
- A random number of LEDs will light up.
- Count the glowing LEDs and press the respective number button on the keypad.
- If the answer is **correct**:
  - The machine will give a short beep.
  - The green indicator LED will glow.
- If the answer is **incorrect**:
  - The buzzer will emit a long beep.
  - All LEDs will blink three times.
  - The quiz will end automatically.
- To exit the quiz mode and return to normal mode, press the ‘#’ button.

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## **4. Summary of Features**

- **Interactive Counting**: Pressing a number key lights up the corresponding number of LEDs.
- **Quiz Mode for Learning**: Encourages number recognition by counting LED lights.
- **Audio Feedback**: The buzzer provides audio cues for actions.
- **Visual Confirmation**: The green LED confirms correct answers.

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## **5. Troubleshooting**

- If LEDs do not light up, check the power connection.
- If the buzzer does not sound, ensure it is properly connected.
- If the quiz does not start, confirm that the '\*' button is functioning.

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## 6. Conclusion

The **Glow & Count Machine** is an excellent educational tool designed to enhance number recognition skills through interactive learning. By combining visual, auditory, and hands-on engagement, it makes learning fun and effective for children and beginners.

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# 7. Mind Trainer Machine - User Manual

## Introduction

The **Mind Trainer Machine** is an interactive memory and reflex training device designed to enhance cognitive skills through a fun and engaging game. The machine consists of four buttons, four different-colored LEDs, a display screen, and a buzzer for feedback.

## Features

- **Four colored LEDs** for sequence-based memory challenges
- **Four buttons** corresponding to each LED
- **A display screen** for instructions and feedback
- **Multiple difficulty levels** that increase as you progress
- **A buzzer** with different sounds for game events

## How to Use the Machine

### 1. Powering On

- Switch on the machine.
- The display screen will show a welcome message.
- The machine is now ready to use.

### 2. Starting the Game

- Press the last button to start the quiz.
- The game begins at **Level 1**.

### 3. Game Rules



## **Level 1**

- One LED will glow for a short time and then turn off.
- Press the button below the corresponding LED.
- If correct, you proceed to the next level.

## **Level 2 and Beyond**

- The machine will randomly glow **two LEDs in sequence**.
- You must press the same buttons in the correct order.
- If correct, you proceed to the next level, where **three LEDs** will glow in sequence.
- As levels increase, the sequence length will increase.

## **4. Feedback System**

- **Correct Answer:**
  - The machine will indicate success with a short beep.
  - The next level starts automatically.
- **Wrong Answer:**
  - All LEDs will blink briefly.
  - A long buzzer sound will play.
  - The game restarts from Level 1.

## **5. Ending the Game**

- The game continues until a wrong answer is given.
- To manually stop the game, press and hold the last button.

## Conclusion

The **Mind Trainer Machine** is an excellent tool for improving memory, focus, and reaction speed. Have fun challenging yourself to reach the highest level!

# 8. QuickEye Memory Machine - User Manual

## Introduction

The **QuickEye Memory Machine** is an interactive memory training system designed to improve visual recall and cognitive skills. It displays an image for a set duration, hides it, and then presents related quiz questions to test memory retention. The difficulty level increases progressively.

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## Features

- **Touchscreen LED Display:** Used for image display and answering quiz questions.
- **WiFi Connectivity:** Requires an internet connection to function.
- **Auto WiFi Connection:** Automatically connects to a specific WiFi network.
- **Progressive Difficulty:** Each level becomes more challenging.
- **Objective Questions:** Multiple-choice questions based on displayed images.

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## Setup Instructions

### Powering On

1. Plug in the machine and press the power button.
2. Wait for the system to boot up.

### WiFi Connection

1. The machine will automatically connect to the following WiFi hotspot:

- **SSID:** Jai Shri Ram
- **Password:** jsk12345

2. Ensure your hotspot is enabled before turning on the machine.
3. Once connected, the system is ready to start the quiz.

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## How to Play

### Step 1: Image Display

- A random image is displayed on the LED touchscreen for **15 seconds**.
- Carefully observe the details in the image.

### Step 2: Image Hides

- The image disappears after **15 seconds**.
- A related question appears on the screen.



### Step 3: Answering the Question

- Four objective answers appear on the touchscreen.
- Tap the correct answer to proceed to the next level.

### Step 4: Increasing Difficulty

- Each level increases in complexity:
  - **Level 1:** Simple images, direct questions.
  - **Level 2:** More detailed images, trickier questions.

- **Level 3:** Harder images, memory-based reasoning.
- **Advanced Levels:** More complex images with multi-layered questions.

## Step 5: Game Progression

- Correct answers move you to the next level.
- Wrong answers may restart the current level or provide hints.

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## Additional Notes

- Ensure the WiFi connection remains stable.
- The touchscreen is interactive; tap the correct answers to continue.
- The machine will automatically reconnect to the specified WiFi hotspot if disconnected.
- Periodically check for software updates to enhance the gaming experience.

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## Troubleshooting

Issue	Solution
No WiFi Connection	Ensure the hotspot <b>Jai Shri Ram</b> is active and within range.
Image Not Loading	Restart the machine and check the internet connection.
Touchscreen Unresponsive	Clean the screen and try again; reboot if necessary.

Incorrect Answer Given

Read the question carefully and try again in the next round.

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Enjoy training your memory with the **QuickEye Memory Machine!** 

# 9. Guessing Game Machine Manual

## Introduction

The Guessing Game Machine is an interactive game that challenges players to guess a secret number between 1 and 99. It features multiple levels with increasing difficulty, a user-friendly interface, and an engaging experience.

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## How to Play

1. **Use the UP/DOWN buttons** to adjust your guess within the range of 1 to 99.
2. **Press the SUBMIT button** to confirm your guess.
3. The display provides feedback:
  - **"HIGHER"** → The secret number is greater than your guess.
  - **"LOWER"** → The secret number is smaller than your guess.
  - **"WIN!"** 🎉 → You guessed correctly!
  - **"LOSE"** ❌ → You failed after 5 attempts.



## Game Features

✓ **Levels System (L1 - L10):** Each level increases in difficulty. ✓ **Attempt Display:** Shows "Try X/Y" before displaying "HIGHER" or "LOWER." ✓ **Restart Mechanism:** If you lose, press the SUBMIT button to restart the game. ✓ **Auto-Level Up:** If you win, the next level starts automatically after 3 seconds.

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## Game Flow

1. **Game Start:** The player starts at Level 1.
2. **Make a Guess:** Use UP/DOWN buttons to adjust the number.
3. **Submit the Guess:** Press the SUBMIT button.
4. **Feedback:**
  - If the guess is wrong, feedback is shown on the display.
  - If the guess is correct, "WIN!" is displayed, and the next level starts automatically after 3 seconds.
  - If the player uses all 5 attempts, "LOSE" is displayed, and the game must be restarted manually.
5. **Level Progression:** Each new level increases the challenge.

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## Game Reset & Restart

- If the player loses, they must press the **SUBMIT button** to restart from Level 1.
- If the player wins, the next level starts automatically.

Enjoy playing and testing your guessing skills! 🎮

