

How to Use the Tool: Finding How Many Grains of Sugar Are in a Packet

Quick Setup Guide

Step 1: Start the Measurement Server

1. Run the program on a computer:
 - Windows: Double-click `myexperiment.exe`
 - Linux: Open terminal, navigate to the file location, and type `./myexperiment`
2. Note your IP address that appears in the terminal window
3. Configure your router to forward port 8086 to this computer

Step 2: Open the Display

1. Open `observer.html` in your web browser
2. Enter the IP address and port 8086
3. Click Connect - you should see a moving horizontal pattern

Step-by-Step Sugar Grain Counting Method

Phase 1: Establish the Range

Start with big questions to find the general range:

1. Ask silently in your mind: "Is the number of sugar grains greater than 1,000?"

- Watch the display for ~1 seconds
- If you see a clear rightward movement, answer is YES
- If no clear movement, answer is NO
- 2. Based on answer, ask next question:
 - If YES: "Is it greater than 10,000?"
 - If NO: "Is it greater than 500?"
- 3. Continue until you have a rough range:
 - Example progression:
 - 1,000? YES
 - 10,000? YES
 - 50,000? NO
 - 25,000? YES
 - 37,500? NO
 - Now you know it's between 25,000 and 37,500

Phase 2: Narrow Down Precisely

Use the "halving method" to get exact number:

1. Take your current range (example: 25,000 to 37,500)
2. Find the midpoint: $(25,000 + 37,500) \div 2 = 31,250$
3. Ask: "Is it greater than 31,250?"
 - If YES: new range is 31,251 to 37,500
 - If NO: new range is 25,000 to 31,250
4. Repeat until exact number:
 - Example:
 - Range: 25,000-31,250
 - Midpoint: 28,125 → "Greater than 28,125?" YES
 - New range: 28,126-31,250
 - Midpoint: 29,688 → "Greater than 29,688?" NO
 - Continue until you have exact number

What to Look For

The "Read" - Positive Response

- Timing: Occurs within 1 seconds of asking the question
- Appearance: Brief but clear movement to the right
- Consistency: Similar movement pattern each time

What to Ignore

- Delayed movements (after 1+ seconds)
- Random fluctuations that don't correspond to your questions
- Leftward movements or other patterns

Practice Tips for Best Results

Before Starting:

- Sit comfortably without distractions
- Have your sugar packet nearby (you don't need to open it)
- Take a moment to clear your mind

During Testing:

- Ask questions silently but clearly in your mind
- Maintain focus on one question at a time
- Wait 2-3 seconds between questions
- Keep a notepad to track your ranges

If You're Getting Unclear Results:

1. Practice with easier targets first:
 - "Is there more than one sugar packet?"
 - "Are there more than 10 grains?"
2. Try different emotional focus:
 - Think about the sweetness
 - Imagine the texture
 - Consider the manufacturing process
3. Take a break if you feel frustrated

Example Complete Session

Target: Sugar grains in one packet

"Is it more than 1,000?" → RIGHT MOVEMENT = YES

"Is it more than 10,000?" → RIGHT MOVEMENT = YES

"Is it more than 50,000?" → NO MOVEMENT = NO

"Is it more than 30,000?" → SLIGHT MOVEMENT = YES

"Is it more than 40,000?" → NO MOVEMENT = NO

"Is it more than 35,000?" → CLEAR MOVEMENT = YES

"Is it more than 37,500?" → NO MOVEMENT = NO

"Is it more than 36,250?" → MOVEMENT = YES






"Is it more than 36,875?" → NO MOVEMENT = NO

...continue until exact number found...

Final answer might be around 36,500 grains (exact number will vary by packet)

Important Reminders

-  Only one person connected at a time

-  Ask questions silently but specifically
-  Watch for immediate rightward movements only
-  Practice locally first to learn the patterns
-  Don't overthink - trust the first clear response
-  Don't continue if tired or distracted

With practice, most users can determine the grain count within 2-3 minutes using this method.