Morton Salt Newark, CA

A VPP star site

5S Overview

"Nothing is more important to Morton Salt than health and safety… not production, not sales, not profit."

C. Herrmann

K+S Experience growth.

windsor

Morton Salt Newark CA Plant Overview

- Newark facility has been in operation since 1926
- VPP Star achieved in October 2007
- Workforce: 17 salaried employees. 57 production employees represented by 2 unions
- Produce food grade salt in vacuum pans
  - Morton Salt round cans
  - Bags, bulk and totes for food industry
- Solar salt and food grade Sea Salt
  - Water softening pellets and solar salt in bags, bulk and totes

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VPP – Employee Participation

- Achieved VPP Star through the involvement and contributions of our employees
  - Plan safety training days – produce training videos
  - Conduct training
  - Perform inspections, report near misses
  - Review and update JSA's
  - Develop lockout procedures
  - Assist in development of programs
  - Participate in MOC and RCA meetings

Andre Mullins –working foreman, member of Teamsters Local 853, VPP team chair.

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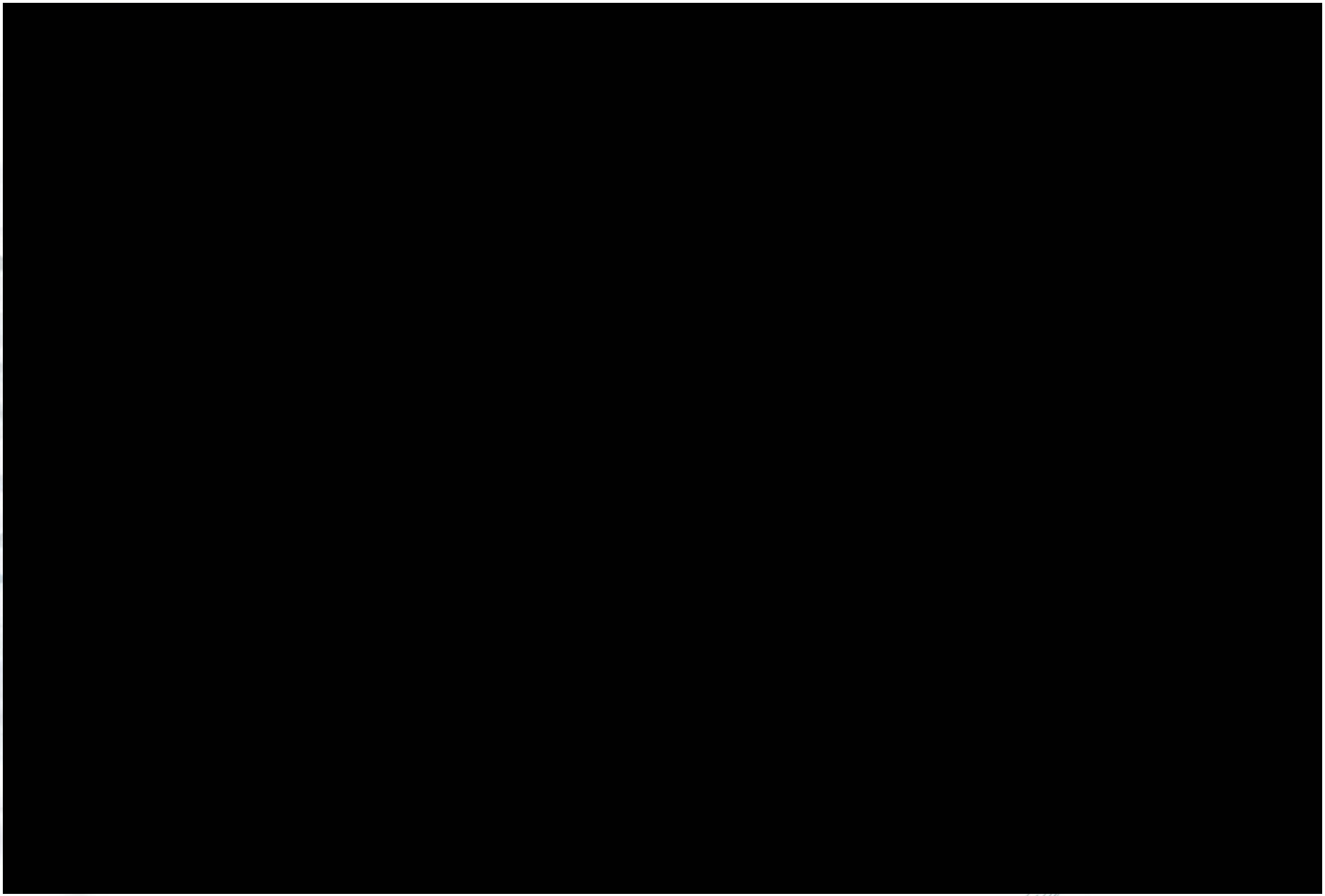

What is 5S?

1. Sort - All unneeded tools, parts and supplies are removed from the area.

2. Set (Set in Order) - A place for everything and everything in its place.

3. Shine - The area is cleaned as the work is performed.

4. Standardize - Cleaning and identification methods are consistently applied.

5. Sustain - 5S is a habit and is continually improved.

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5S and why do we want to do it?

- 5S represents 5 disciplines for maintaining a visual workplace (visual controls and information systems).
- Focus in the areas where employees work, tools they use and how the job is performed.
- Touches all of the areas in the plant.
  - Safety, Quality, Environmental, Production, Maintenance

5S and VPP

- 5s involves continuous improvement
- All employees have involvement in changes to be made in their work area
- Removes hazards from the work place
  - Tools in poor condition
  - Wrong tool for the job
  - Improper storage of PPE, chemicals, sharp tools etc…
- Improves housekeeping

Sort

- Sorting is the first step in cleaning up the work area
- It helps to identify things which are no longer necessary in the space.

Sort

- Separate according to:
  - What is needed
  - Needed later
  - Not needed – red tag to see if they have other use or discard
- Discard **what is not needed!!!!**
- Separate needed items by frequency of use
- For items which are needed - identify where they should go.

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Set (Set in Order)

- Focuses on efficiency.
- When we translate this to “Set or Set in Order”, the intent is to arrange the tools, equipment and parts in a manner that promotes workflow.
- For example, tools and equipment should be kept where they will be used (i.e. set the flow path), and the process should be set in an order that maximizes efficiency.
- For everything there should be a place and everything should be in its place

Standardize

- **Standardize** - Cleaning and identification methods are consistently applied.
- Standardized work practices or operating in a **consistent and standardized fashion.**
- Every job has duties that use Sort, Set in Order and Shine.

Byron Knox – Miller/forklift driver, member of Teamsters Local 853

“Nothing is more important to Morton Salt than health and safety… not production, not sales, not profit.”

Improvement Principles

Do not look for excuses, look for ways to make it happen

Do not worry about being perfect - even if you only get it half right “start NOW”!

Look for wisdom from ten people rather than one.

Never stop doing 5S.

With improvement comes change; with change comes improvement

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Chemicals in lab

- Maintain proper labeling

Safety Equipment

- Identified for ready use
- Separate from other materials
- Clear access
- Efficient inspection and maintenance of supplies

Workstation

- Necessary items on hand and in good condition to perform tasks
- Updated materials – no old forms
- No unnecessary items to create hazard
- Sustainable across shifts and over time as standard is set and maintained

Workstation Tools

- Required equipment in good working condition
- Ease of inspection of equipment / tools for damage
- No improper tools available to use
- Missing items quickly identified and replaced

Quality Control Sampling material Before

Quality Control Sampling material Now

- Proper labeling for equipment and work areas for consistently reported lab results

Work tables

- Proper carts and tables for each purpose
- Loading capacity directions clearly established
- Efficient inspection of the condition of equipment

Storage in work areas

- Equipment available in each area when needed
- Consistent inspection of equipment

Confined Space Cabinet–

BEFORE

Confined Space Cabinet–

After

Fork Lift Traffic Routes

- Set parking spaces for mobile equipment
- 2 traffic routes in and out of warehouse

Warehouse Layout

- Designated area for production storage
- Close to working area (reduces transportation waste)
- Benefits loaders (know where to look!!!)
- Helps shipping (know where to go)

Package Material Storage

- Designate storage locations for each material
- First In First Out (FIFO)
- Safe storage locations are used

Safe Use of Vacuum Equipment – Potential hazard of improperly assembly of vacuum system

BEFORE

After

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After 5S

Implementing 5S

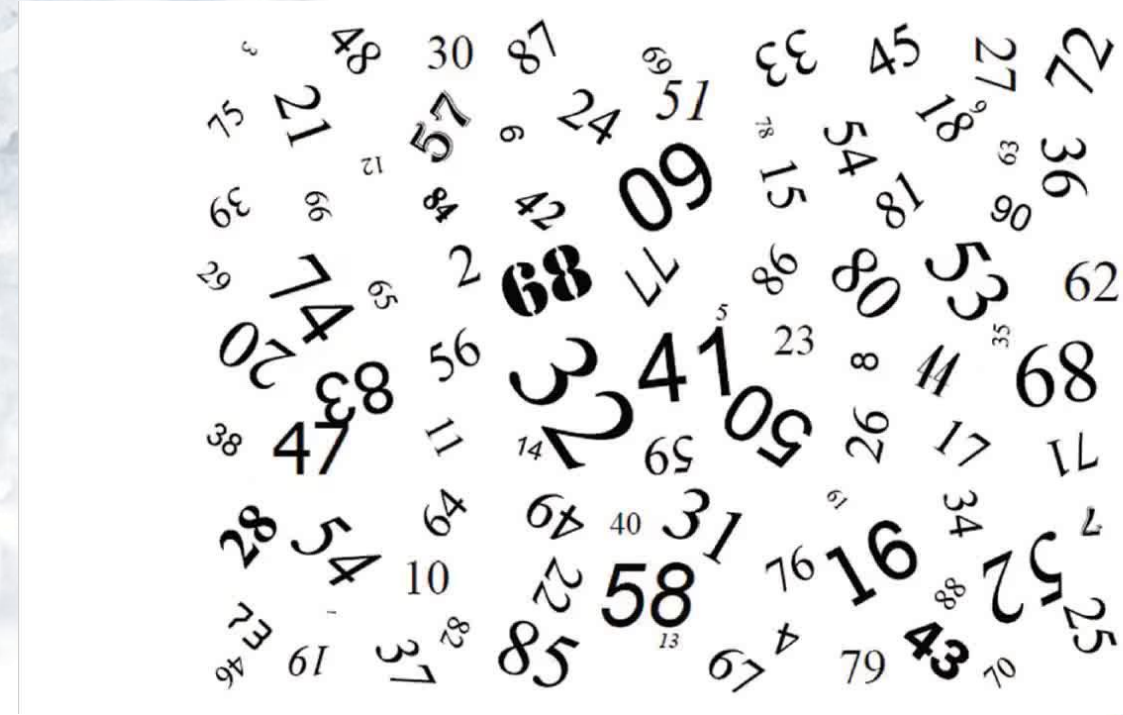
- Implementing 5S at Newark started with our employees. The employees made an introduction to 5S Video using the Nilfisk vacuums as an example.

Implementing 5S

- Our Safety Day theme was done on 5S

Implementing 5S

- One of the sessions we went over each S and used a numbers game to show another way how 5S works.



Numbers Game

Your Task:

On the next slide,

find the numbers 1

through 49, in order.

(find 1, then 2, then 3, etc.)

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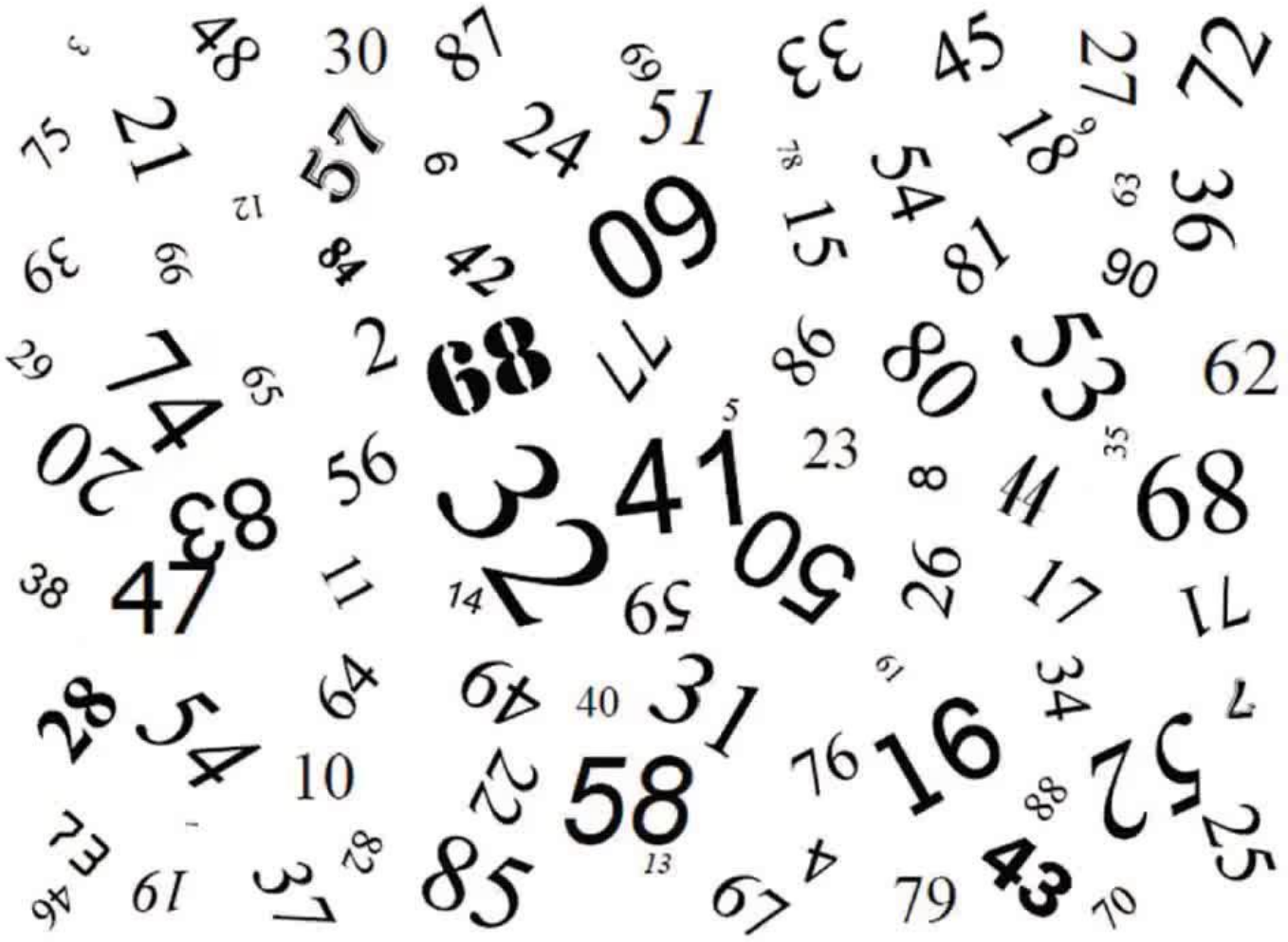

How far did you get?

- Write down your score,
- We are going to do this a few times.

- Get rid of what you don’t need.

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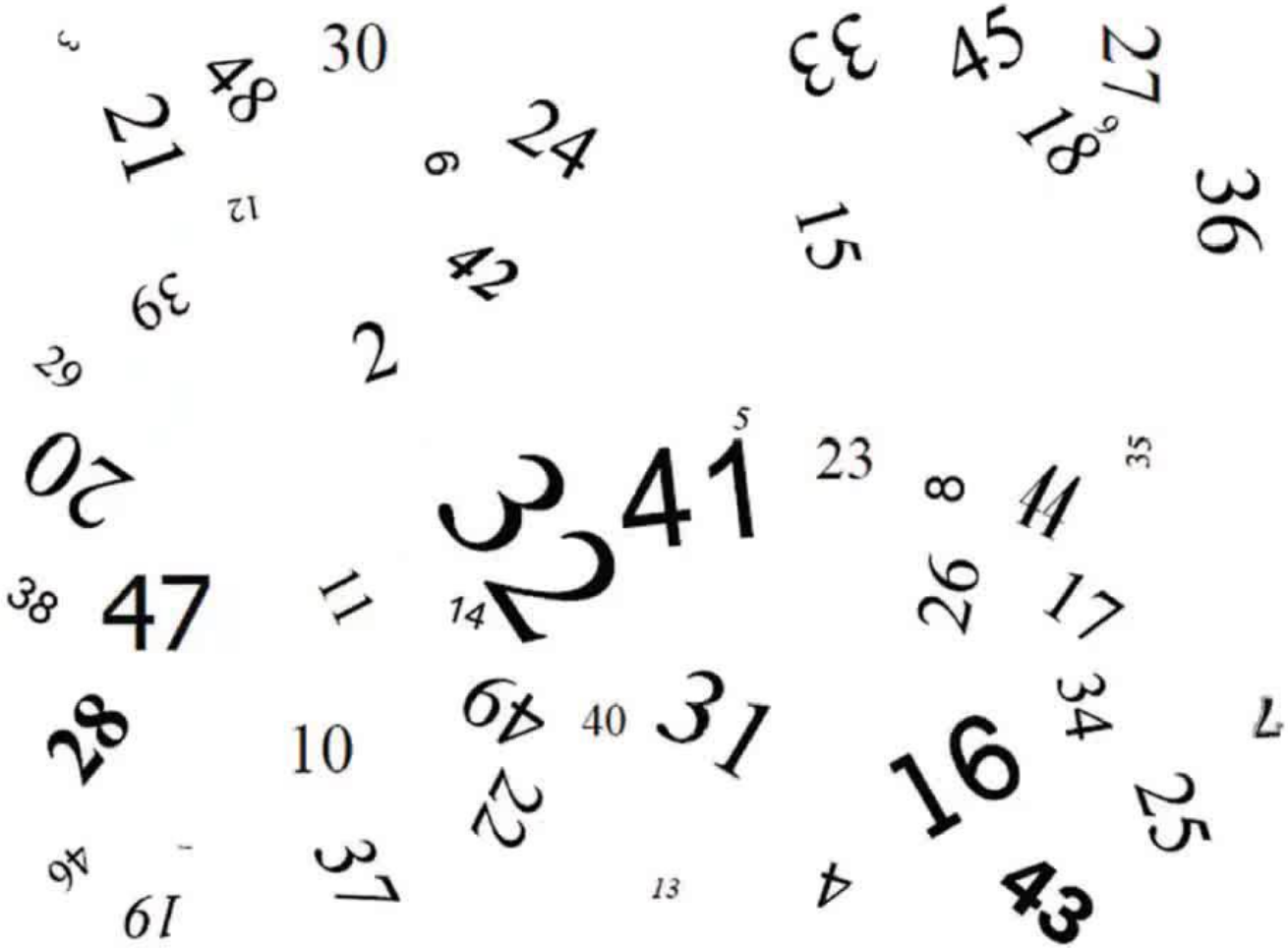
Step 1: sort

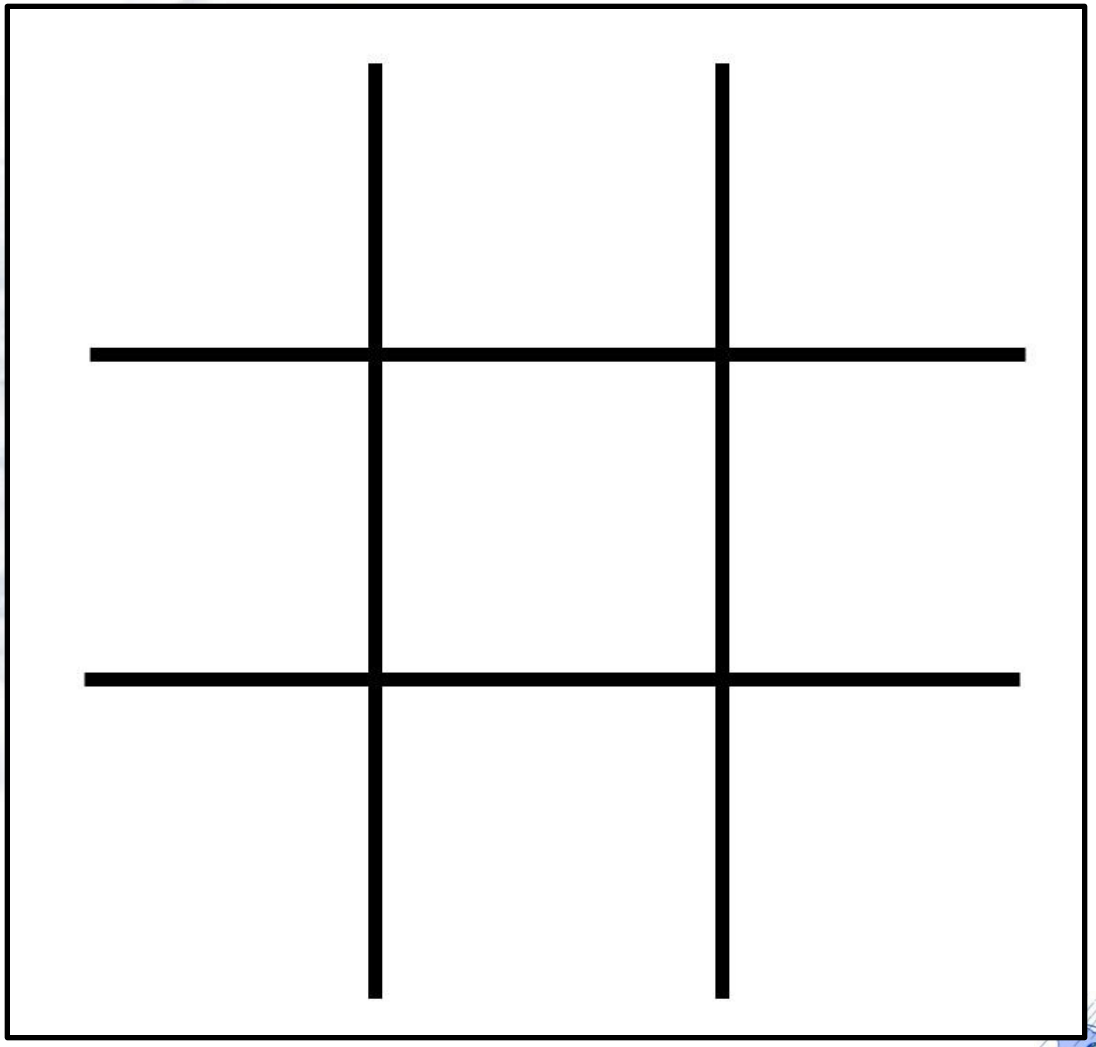
- The screen showed 1 -99, but we needed 1-49.
- We will get rid of 50 -99.

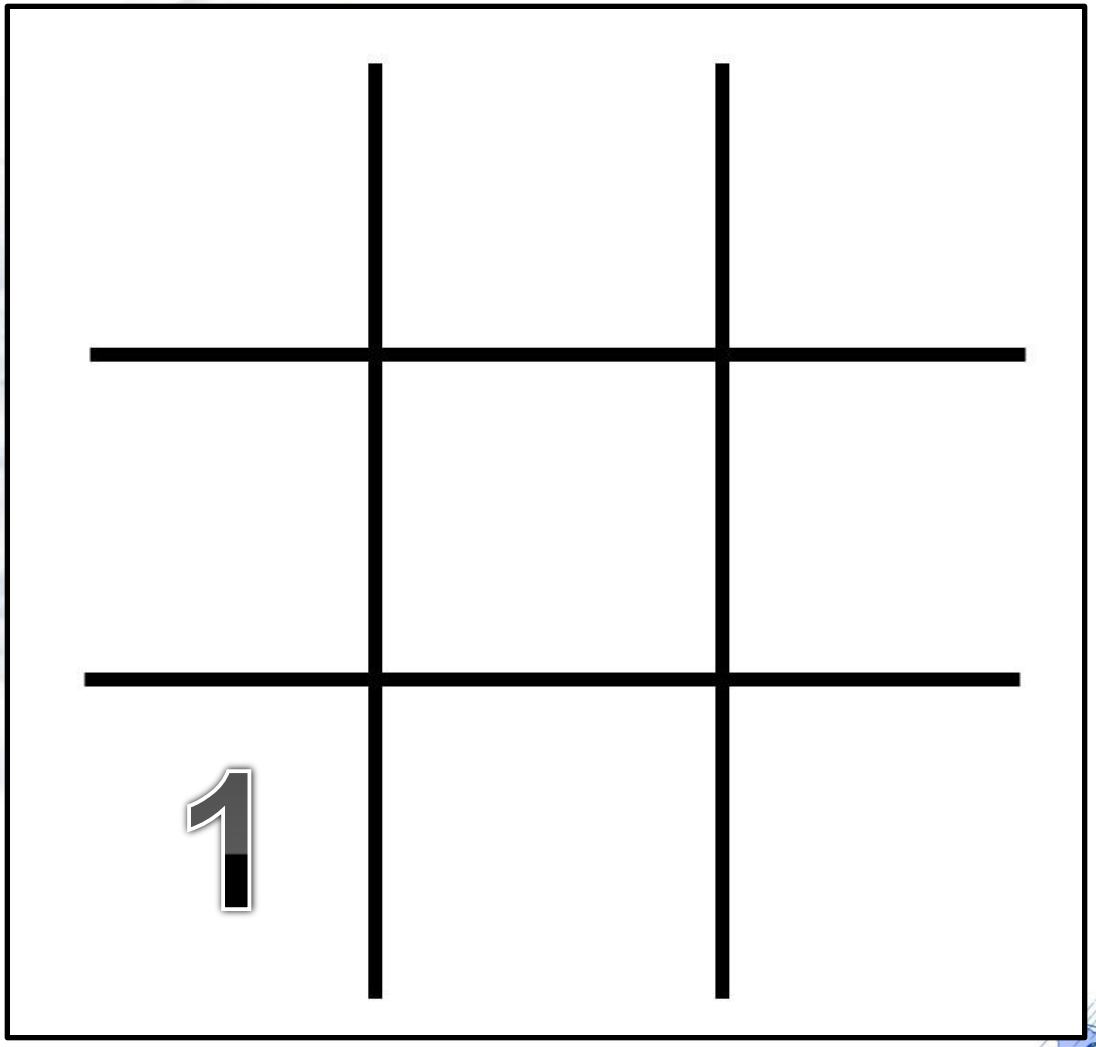


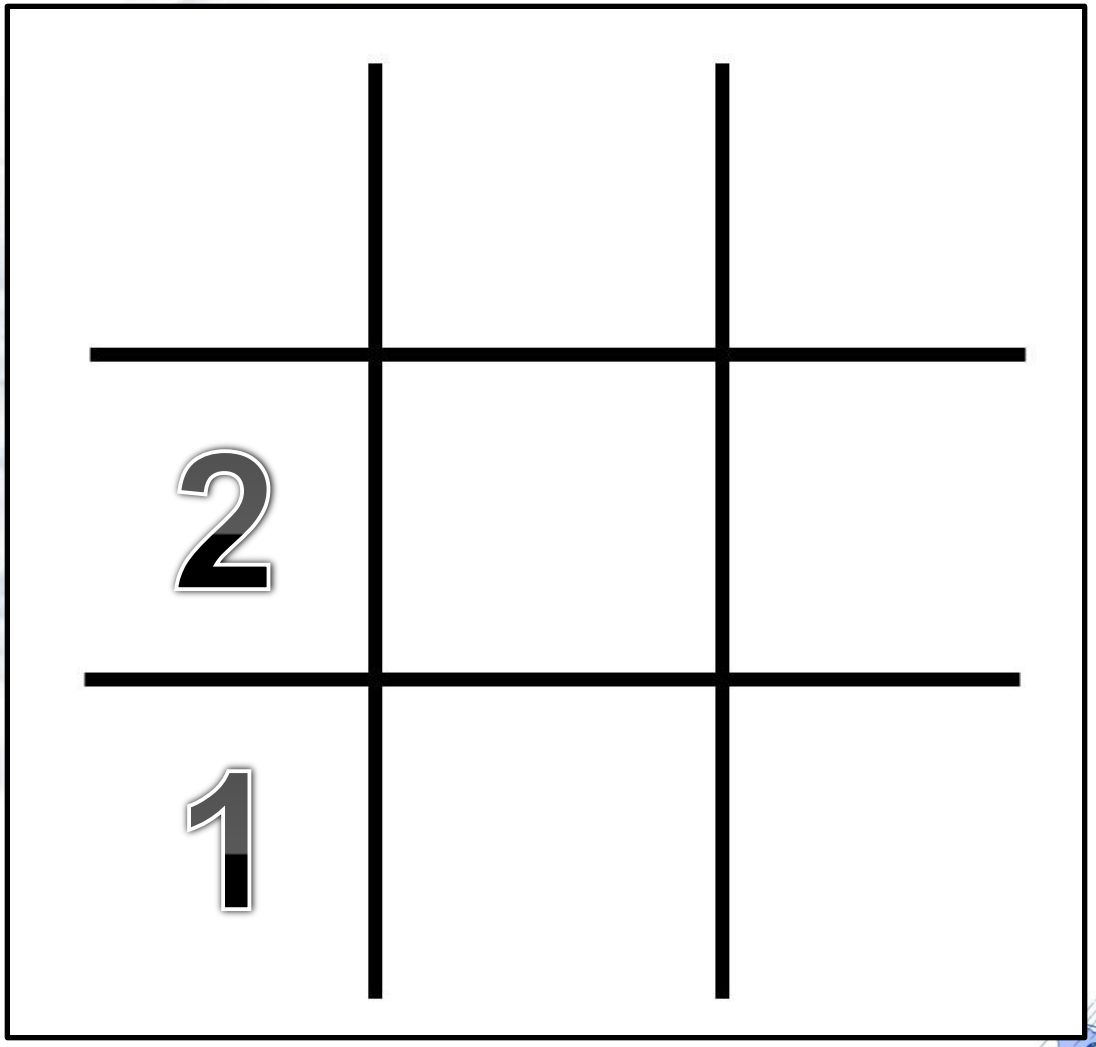
- Write down your score,
- we are going to do this
- a few more times.

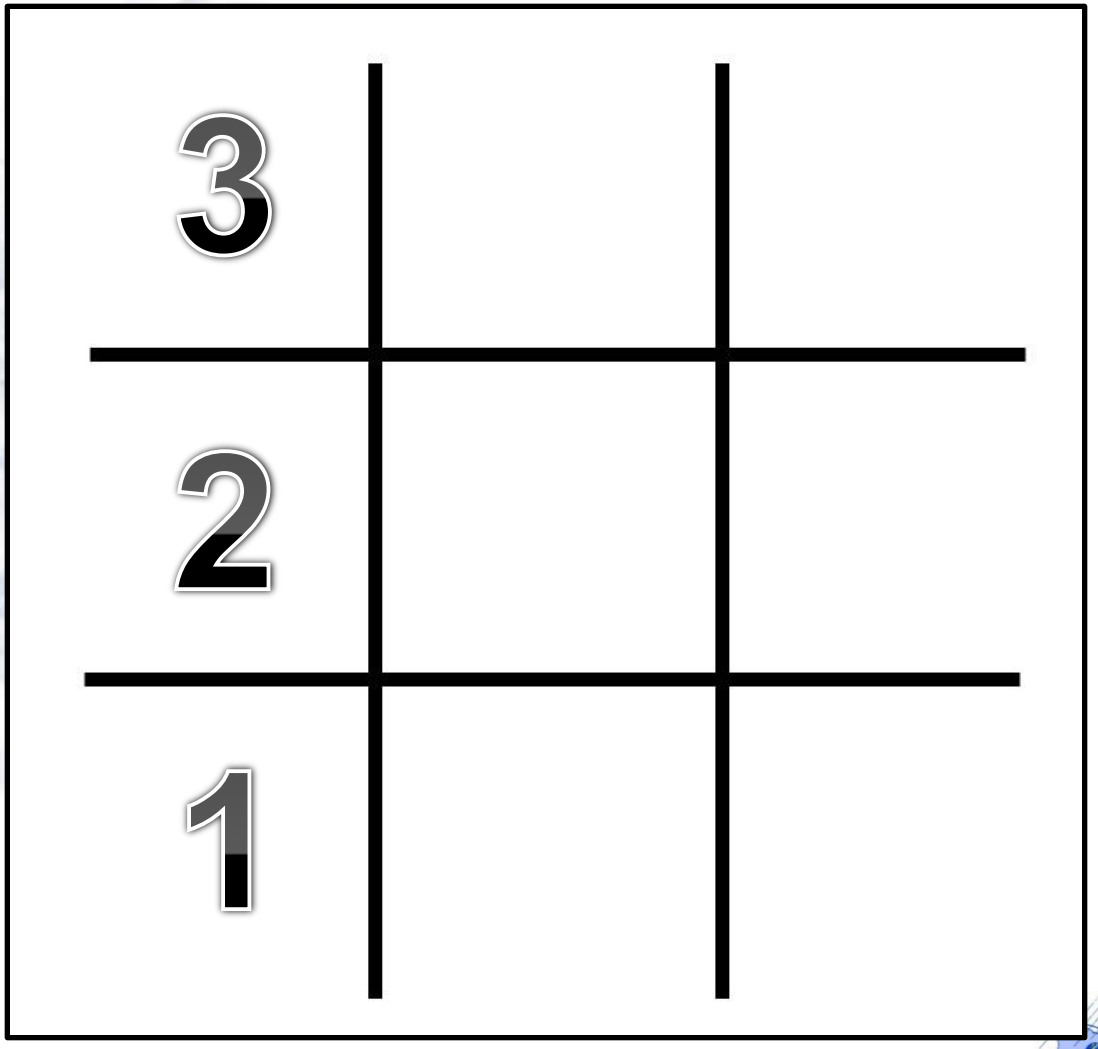
Step 2: set (set in order)

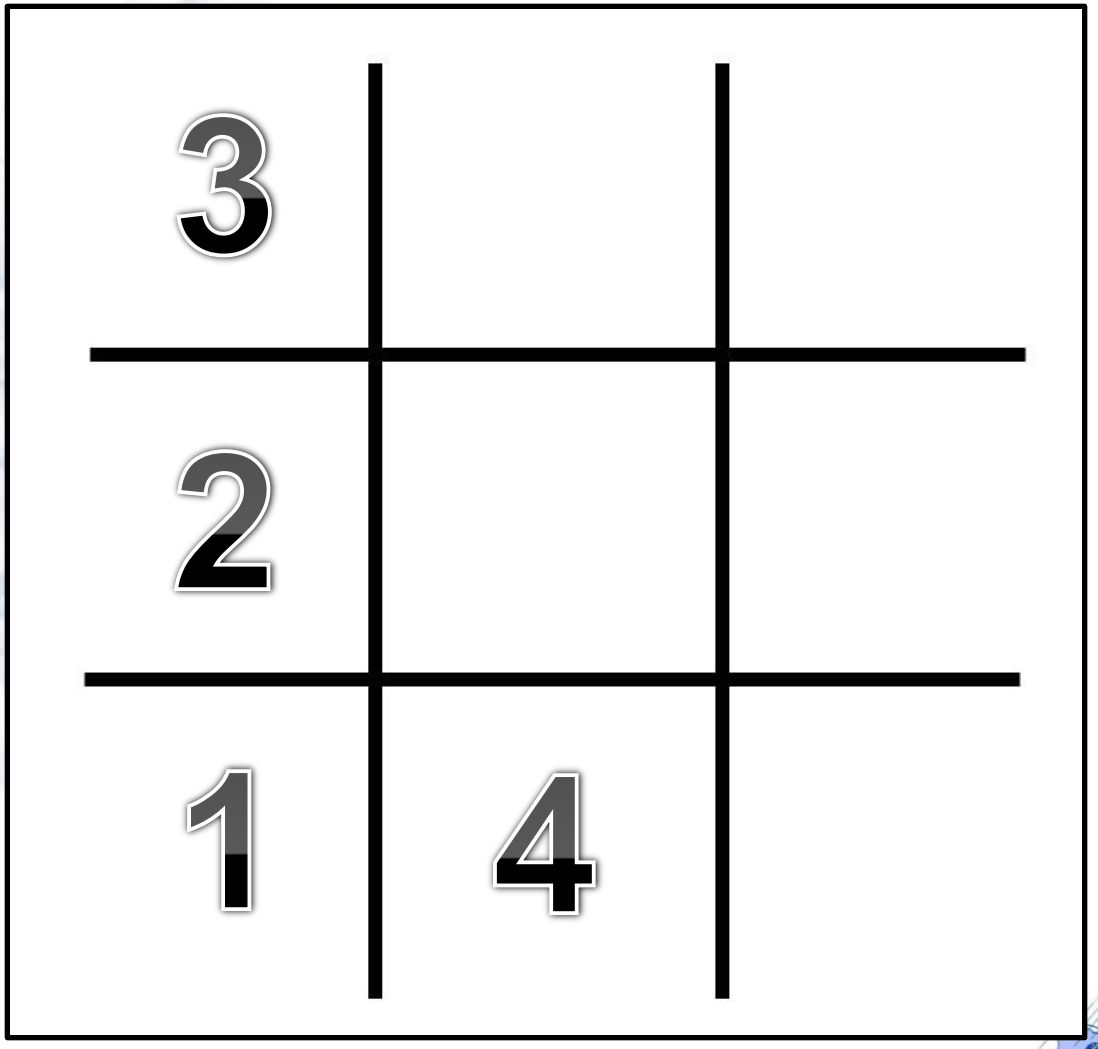
- Everything has its place.




1


2
1


3
2
1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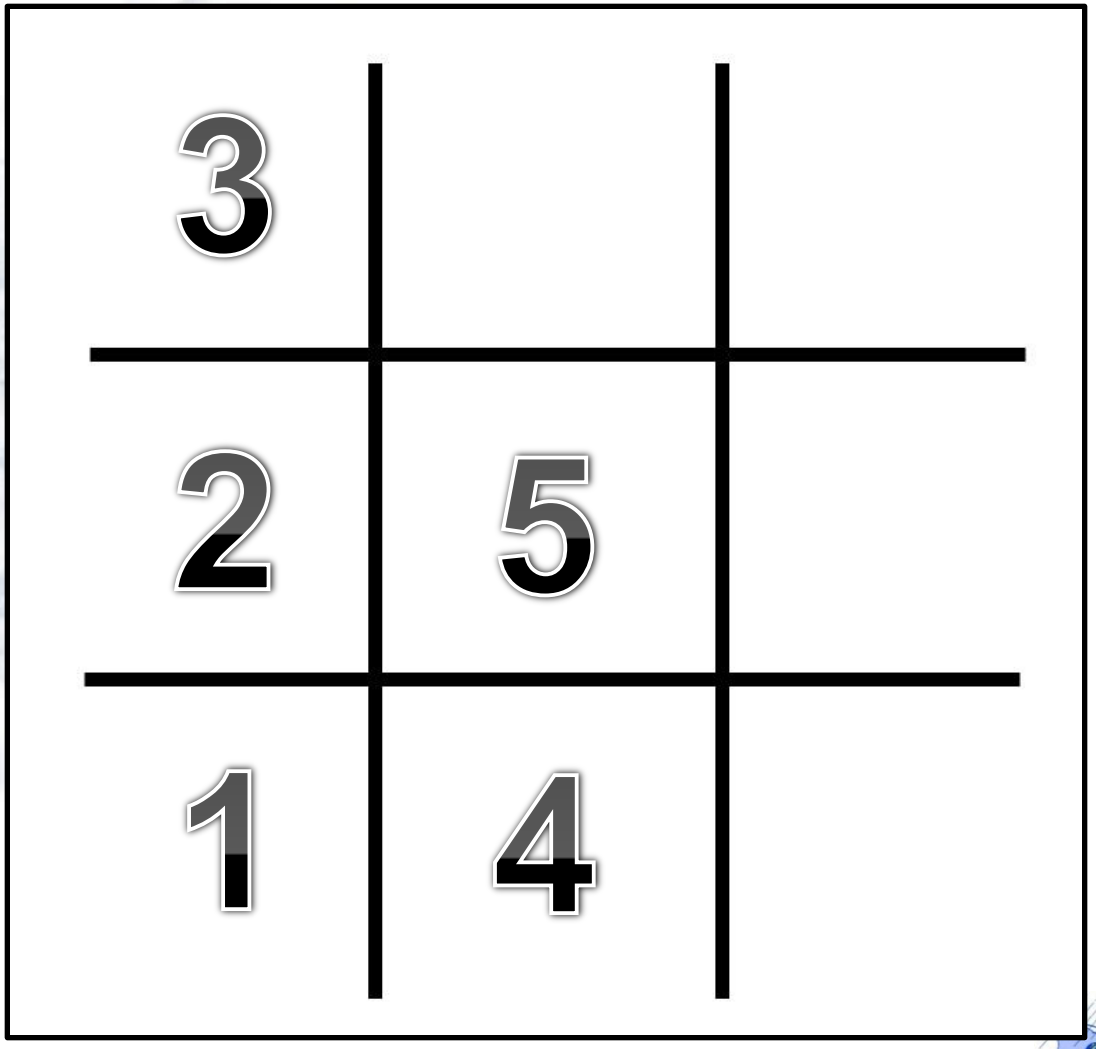
3
2
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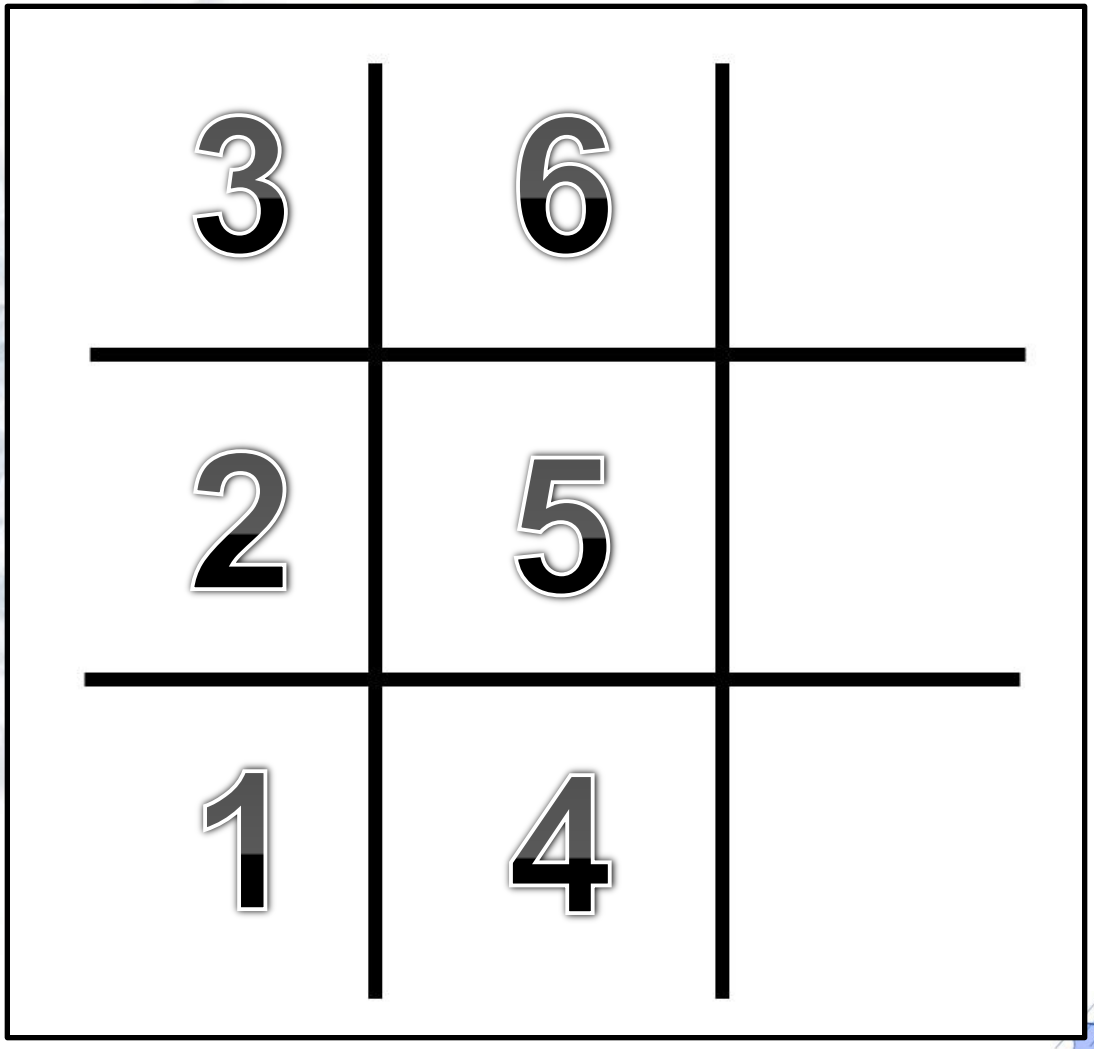
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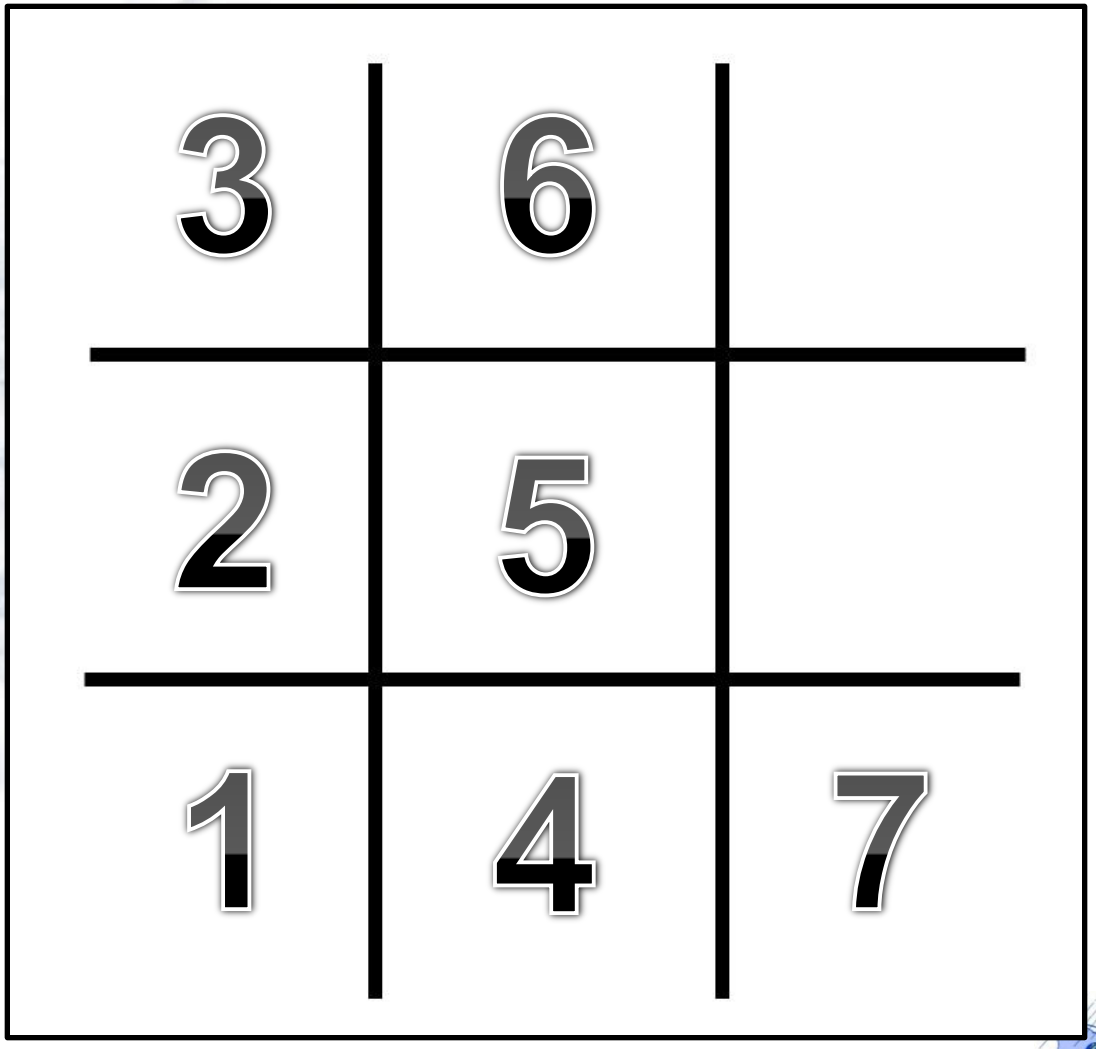
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6
2
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1
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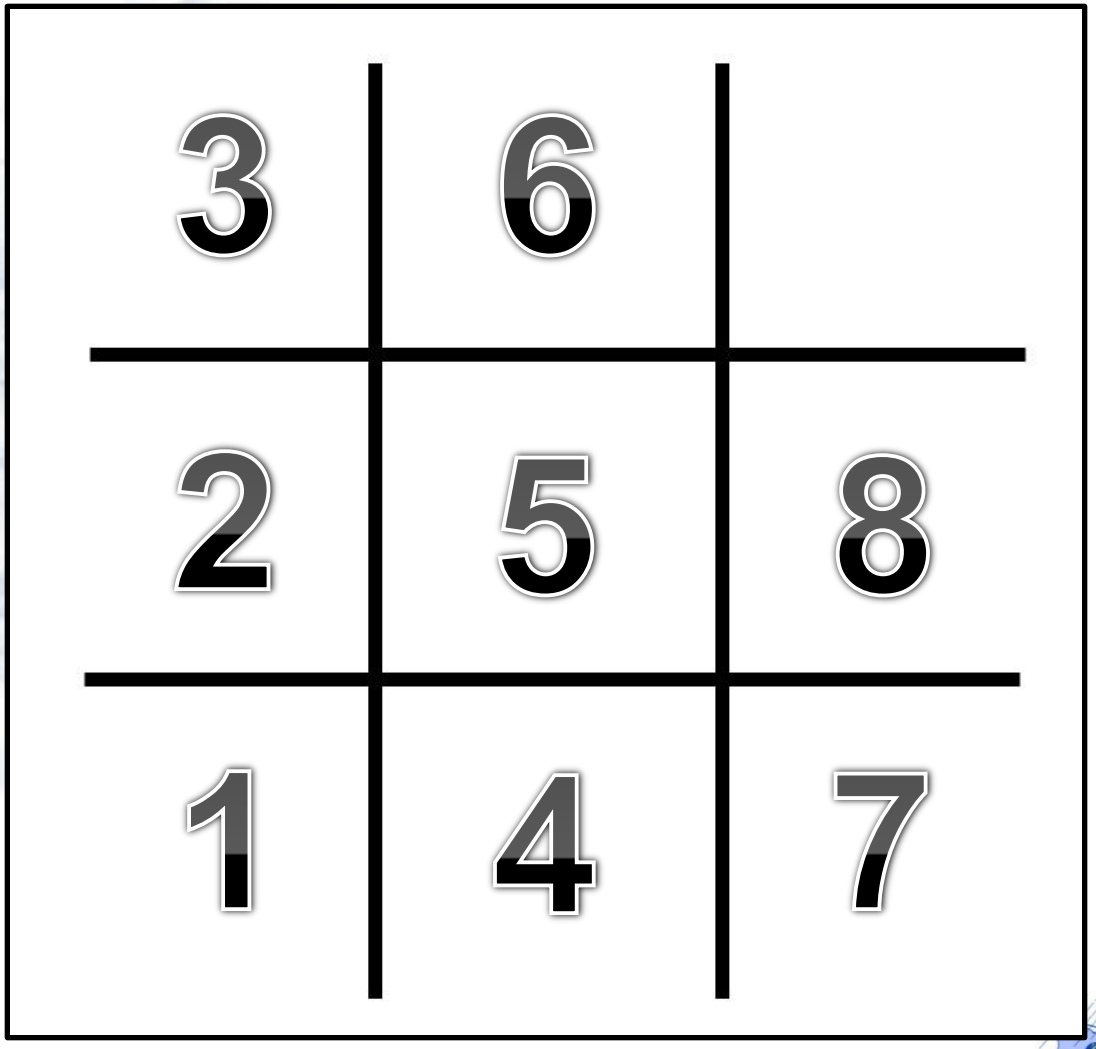
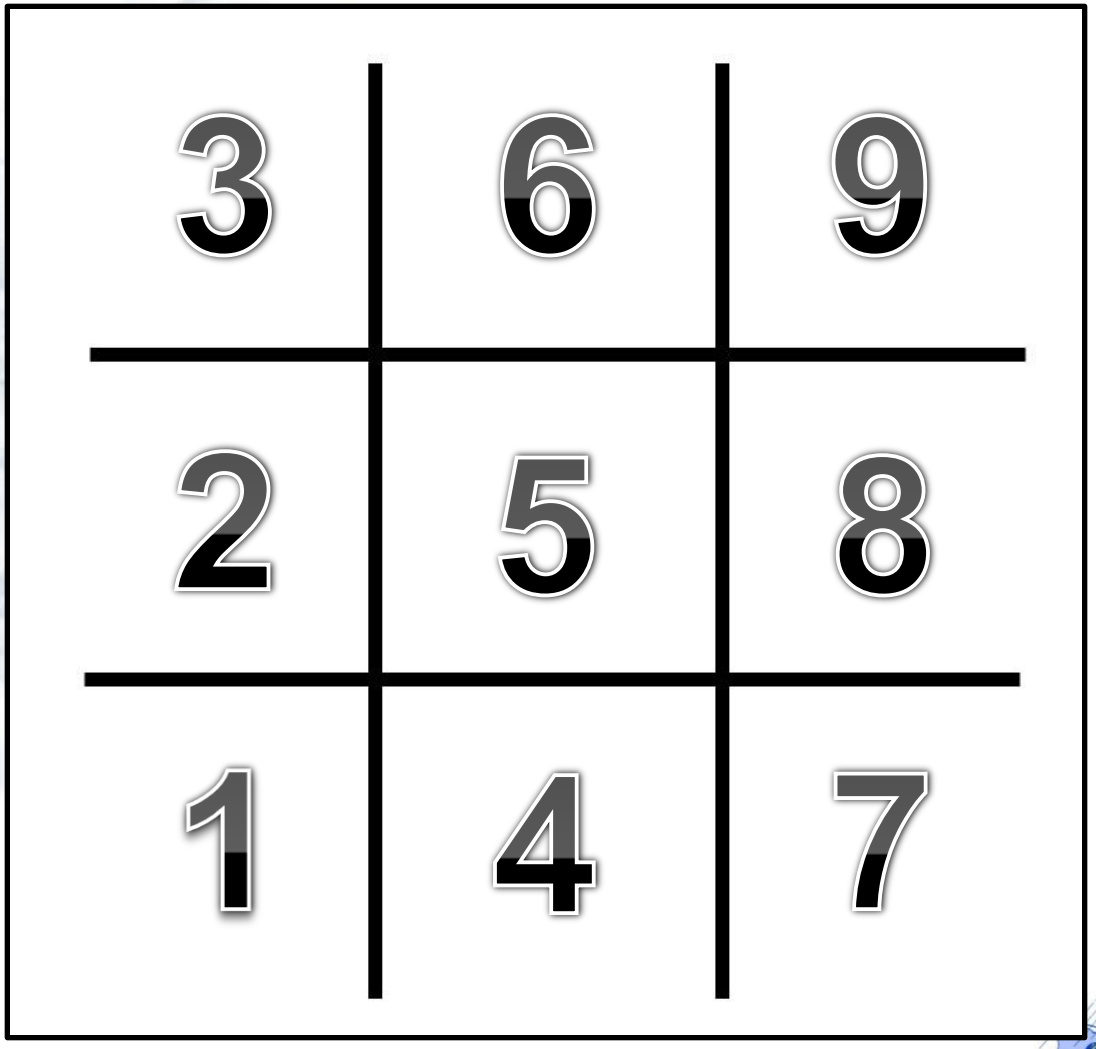
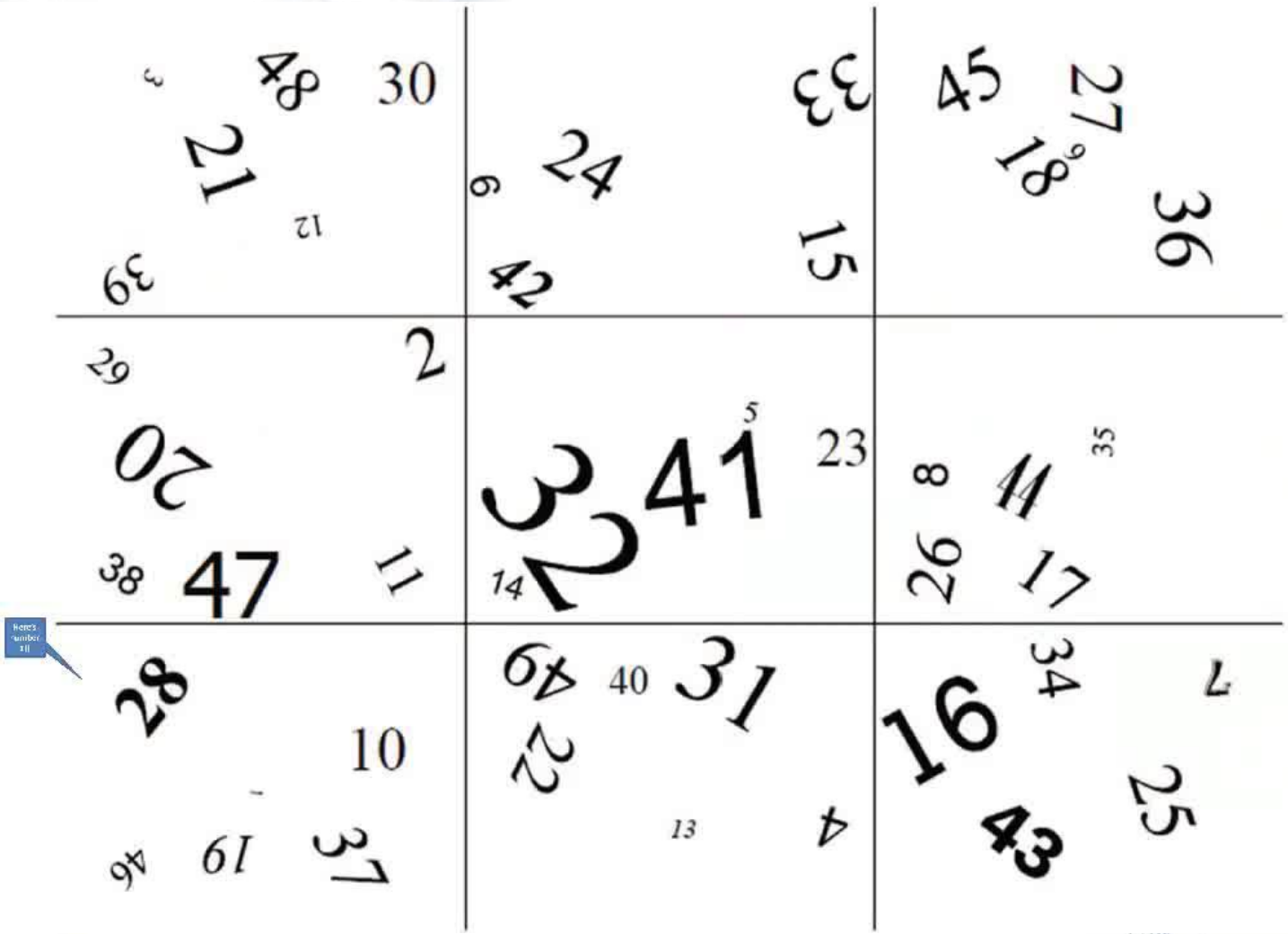
7


3 6
2 5 8
1 4 7


3 6 9
2 5 8
1 4 7


Here's number 11!

What did you score this time?

- Write down your score again.

Skip step 3 – Shine.

Step 4: standardize

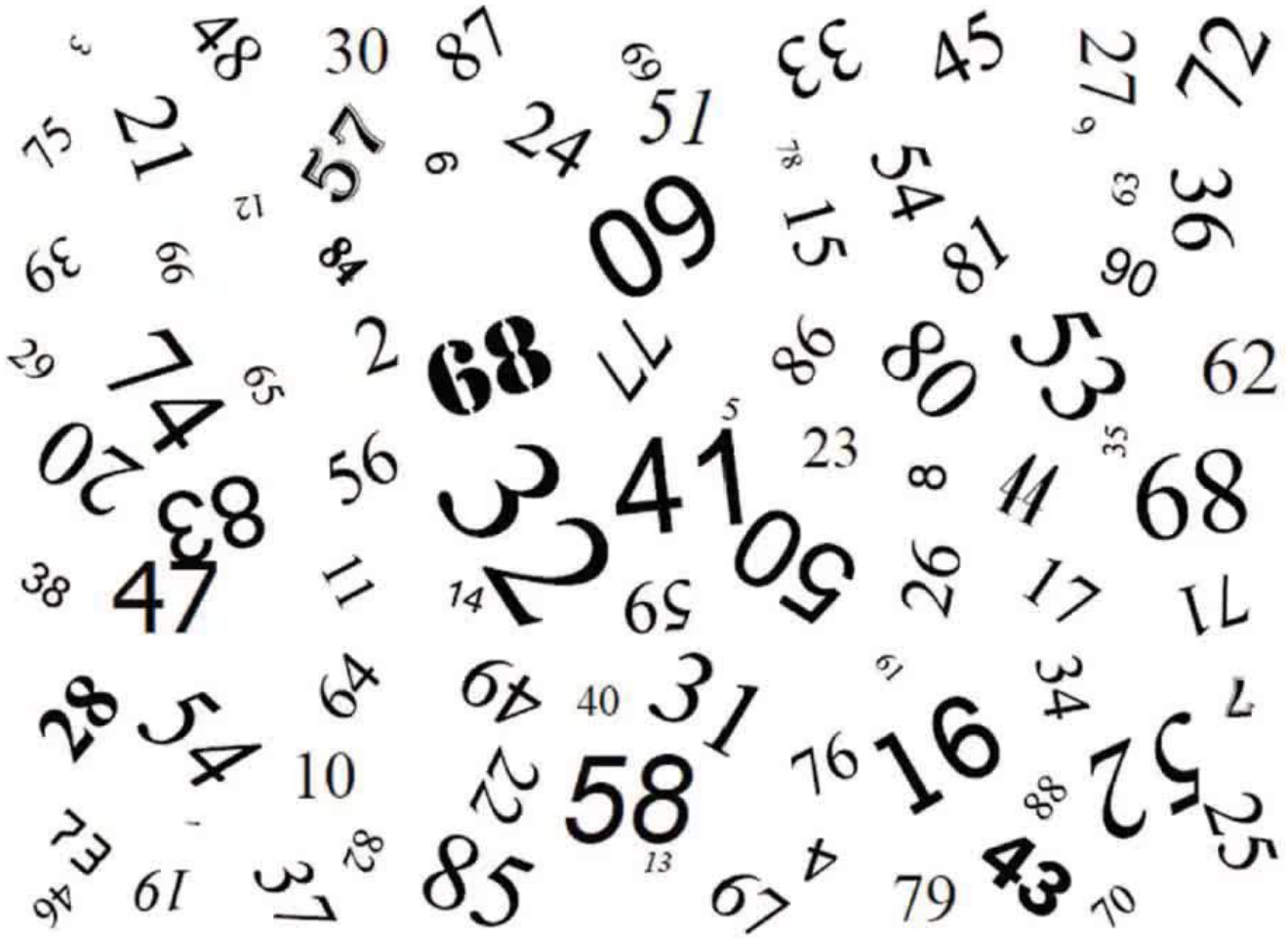
- Everything has its place.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	

- Did you find all of the numbers?

Find the missing numbers

Experience growth.



Experience growth.

- Find them?

Experience growth.

- 5s principles applied

Experience growth.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17		19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41		43	44	45	46	47	48	49	

Experience growth.

- Missing numbers:

  18 and 42

Experience growth.

Summary

5S is for all employees

Clean-up and organize your work area every day so that each new day is easier and safer than the day before.

Share your input with your leaders so that the tools you need will be available to you, increasing your efficiency, easier to find and inspect

Take a good look around...imagine zero waste, zero confusion and <u>zero injuries</u>!

Experience growth.

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