

# Continuous Improvement Toolkit

**5S**



# The Continuous Improvement Map



# 5S

An improvement tool for organizing and maintaining a **disciplined** and **productive** workplace



# 5S

Creates a better working environment

Reduces waste

Improves efficiency, safety and quality



**5S**

Represents **five** simple **practices** that starts with the letter “S”.



# 5S

Commonly applied in **manufacturing** facilities . . .

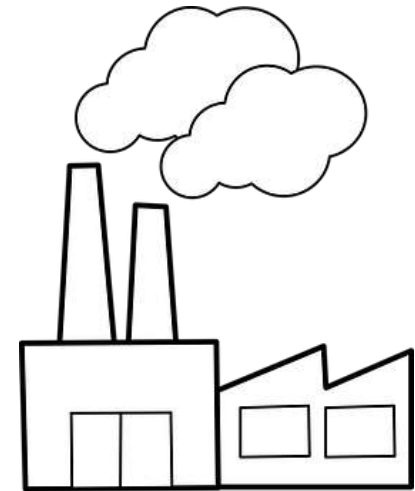
Storage areas

Production lines

Business Impact

Maintenance areas

Office areas



# 5S

It is now being increasingly applied to a wide variety of industries including:

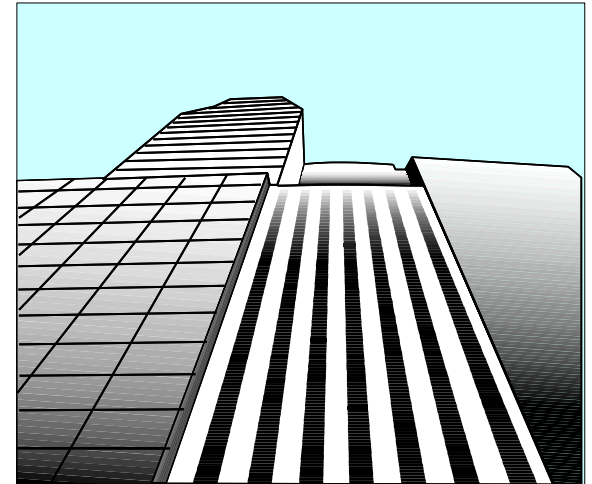
Education

Retail

Health care

Hospitality

Showrooms



Where else?

# 5S

A **Japanese** management approach

Originally developed by **Toyota**

Part of their **Lean Manufacturing System**





# 5S

Represents an important component of the  
Lean production system



A prerequisite for **driving other Lean techniques** such as  
TPM, Flow and Kaizen

# 5S

Many companies **start** their lean transformation journey with 5S

One of the **easiest** lean techniques

Exposes some of the most **visible** examples of waste

Many lean experts believe that you need to be successful with 5S so you don't struggle with the other lean techniques during lean implementation



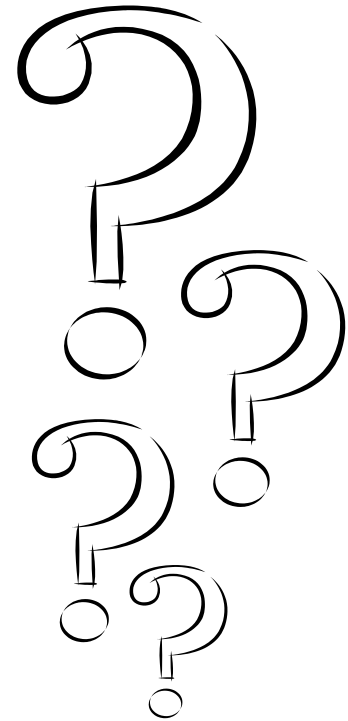
# 5S

5S is not just about the **appearance**

It is not just about keeping the place **tidy**

It is not a **housekeeping** technique

5S is a structured way to create and maintain an organized, clean, safe, and high-performing work environment



# 5S

It is a way to . . .

Making the work areas safer and more **pleasant** to work in

Eliminating **waste**

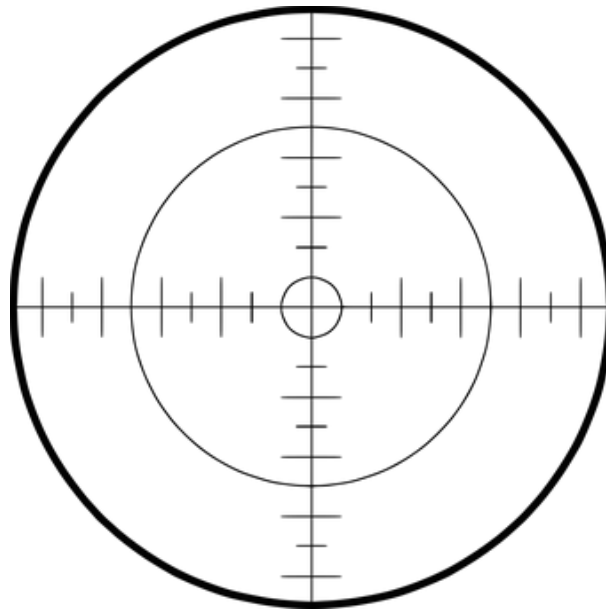
Making a more efficient and **productive** workplace

Identifying **opportunities** for improvement



# 5S

Helps making waste **visible** to everyone so it can be eliminated right away



You can't eliminate the waste if you can't even see it

# 5S

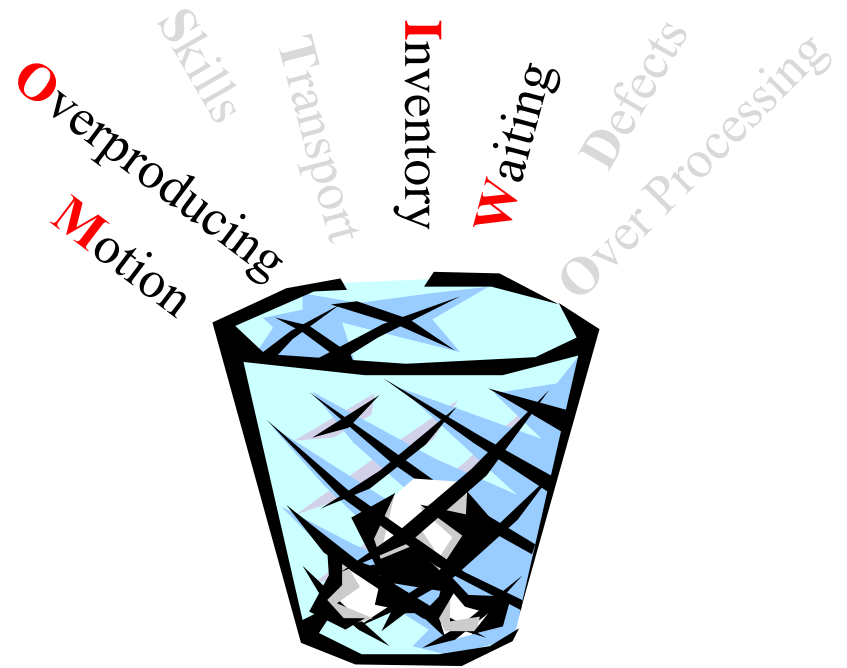
With 5S, you can eliminate or reduce . . .

Excess inventory

Wasted motion

Waiting while searching to find the required items

Having more parts than required



# 5S

## How it Works?

5S will create an environment in which people are sensitive about mistakes and abnormalities

Employees will be able to distinguish between normal and abnormal conditions at a glance

Problems are quickly identified and mistakes are minimized

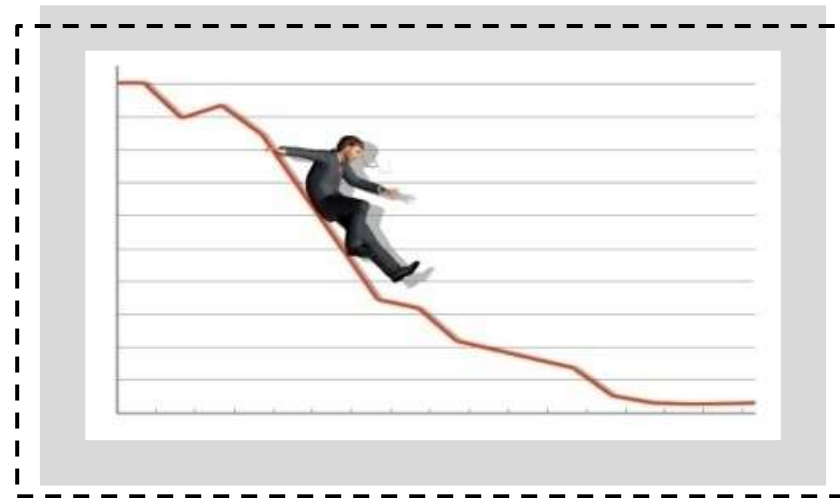
Work areas are easier to be managed



# 5S

## Promotes effectiveness

A clean and tidy workplace is also essential for efficient operations and for the creation of smooth working



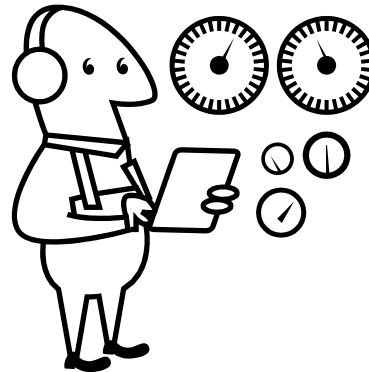


# 5S

## Enhances Quality

Accuracy depends on cleanliness

Promotes care of machines and equipment

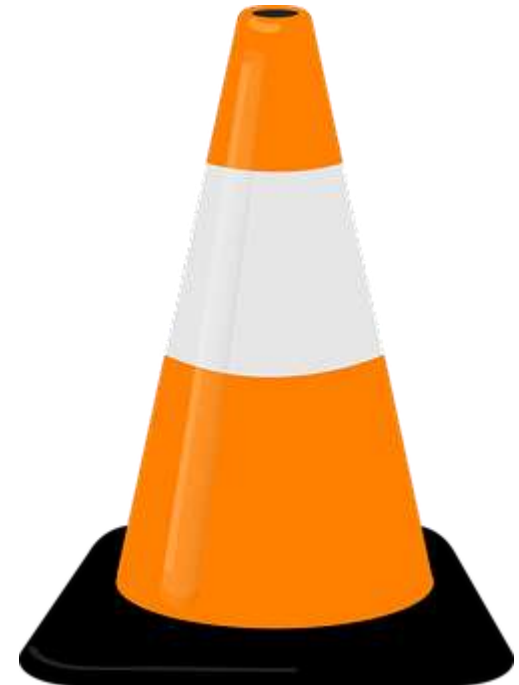


# 5S

## Enhances Safety

Safety depends on care and organization

Mistakes and accidents are minimized



# 5S

## Positive Impressions on Customers

It is expected that the standards displayed in the workplace will be reflected in the product/service delivered

This will build customer confidence in the product/service

It will improve the **image** of the business

More **profitable** and competitive business



# 5S

## Other Benefits

Reduced **wasted time** looking for things

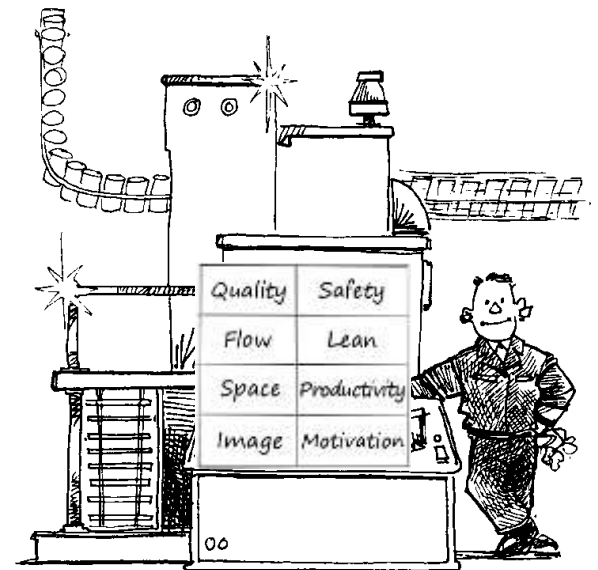
Reduced **frustration**

Making everybody's job **easier**

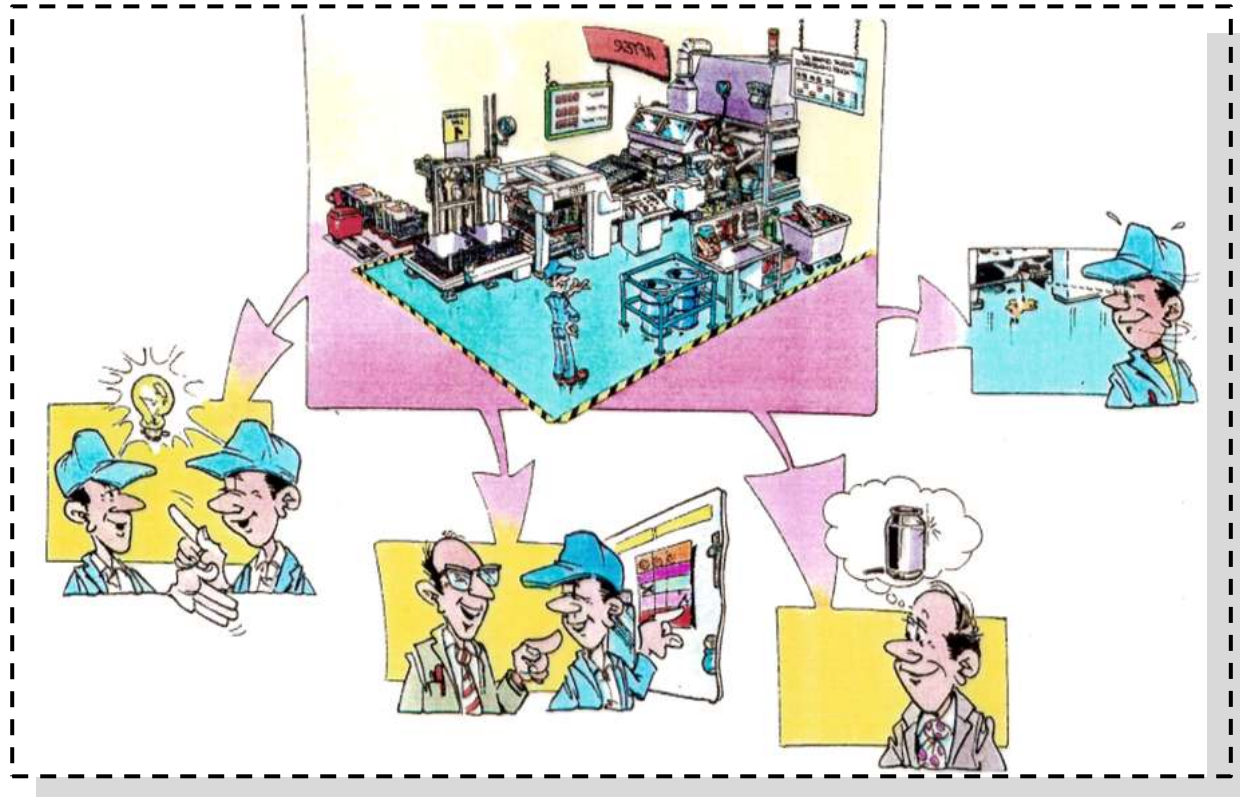
Building **pride** in the workplace

Creating workplace **ownership** and motivation

Encouraging **teamwork**



# 5S



Employee, customer and management **satisfaction** increases

# 5S

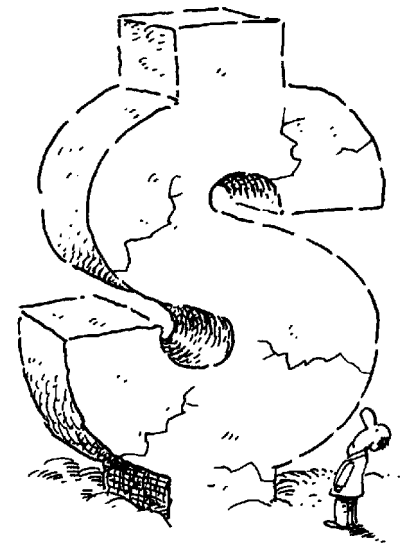
## Financial Justification

5S is sometimes considered as a stand-alone program

Cost savings can't be captured in most costing systems

There will be soft-savings in terms of quality, safety and moral

However, there will be no hard-savings that can be measured and tracked



# 5S

## Financial Justification

One way to justify the value of 5S is by measuring the **reduction in waste**

The time spent searching  
for tools

The time spent clearing the  
space to work

The reduction in inventory  
and work in process



# 5S

## Financial Justification

### You can also measure . . .

The reduction in accidents and near misses

The reduction in absenteeism

The reduction in defects and breakdowns

The reduction in cycle times





# 5S

## Financial Justification

Ensure these improvements are documented and backed up by data and analysis as this will build your case for investment



# 5S

The term 5S is an abbreviation for five **Japanese** words

S1

S2

S3

S4

S5

**Seiri - Seiton - Seisou - Seiketsu - Shitsuke**



# 5S

These five words are often translated into **English** as

S1

S2

S3

S4

S5

**Sort – Set in order - Shine - Standardize - Sustain**

ABCDEF  
GHIJKL

Other English translations are possible!



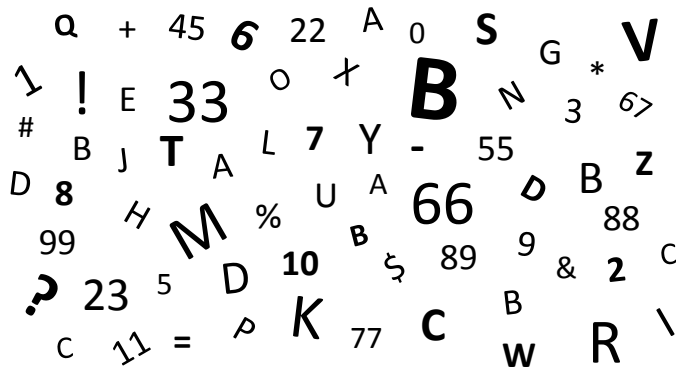
# 5S

## How Quick Can You Do Your Job?

Suppose that this is your new workplace

You have to link the numbers from 1 to 10 in ascending order

Record your time once you finish

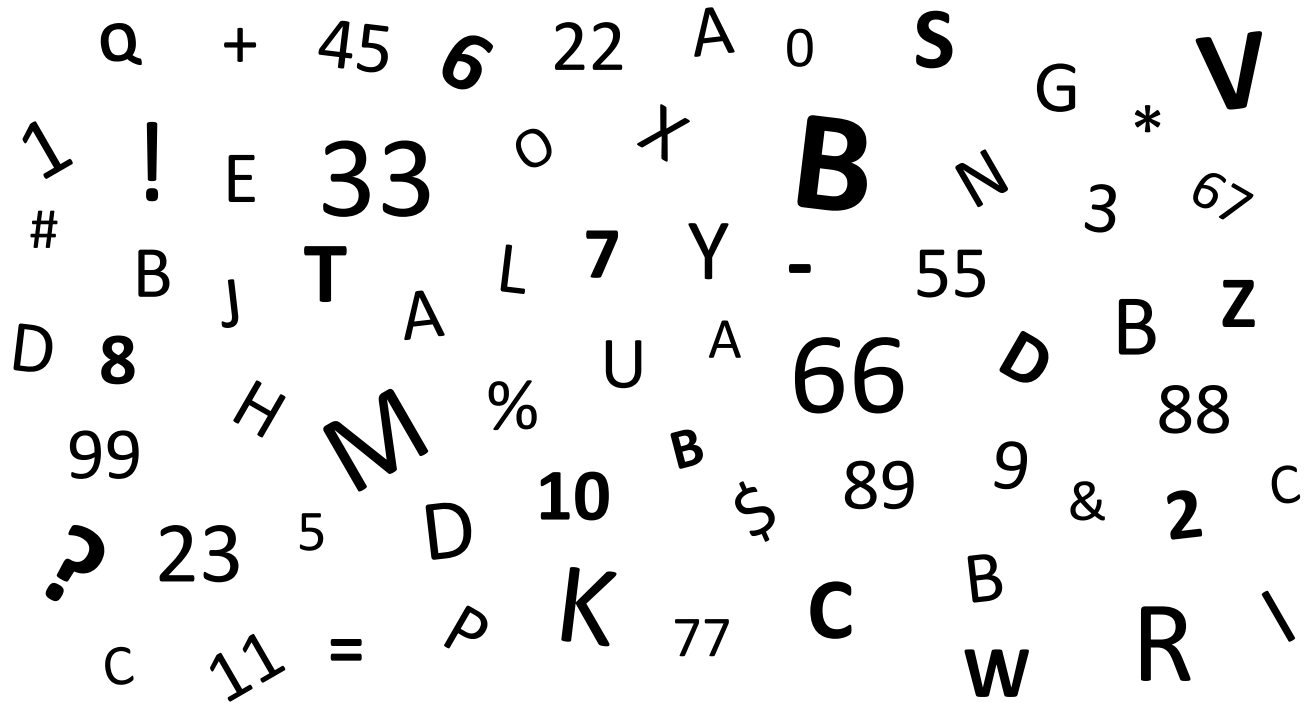


**Rule:** If you can't find the number, skip to the next!



# 5S

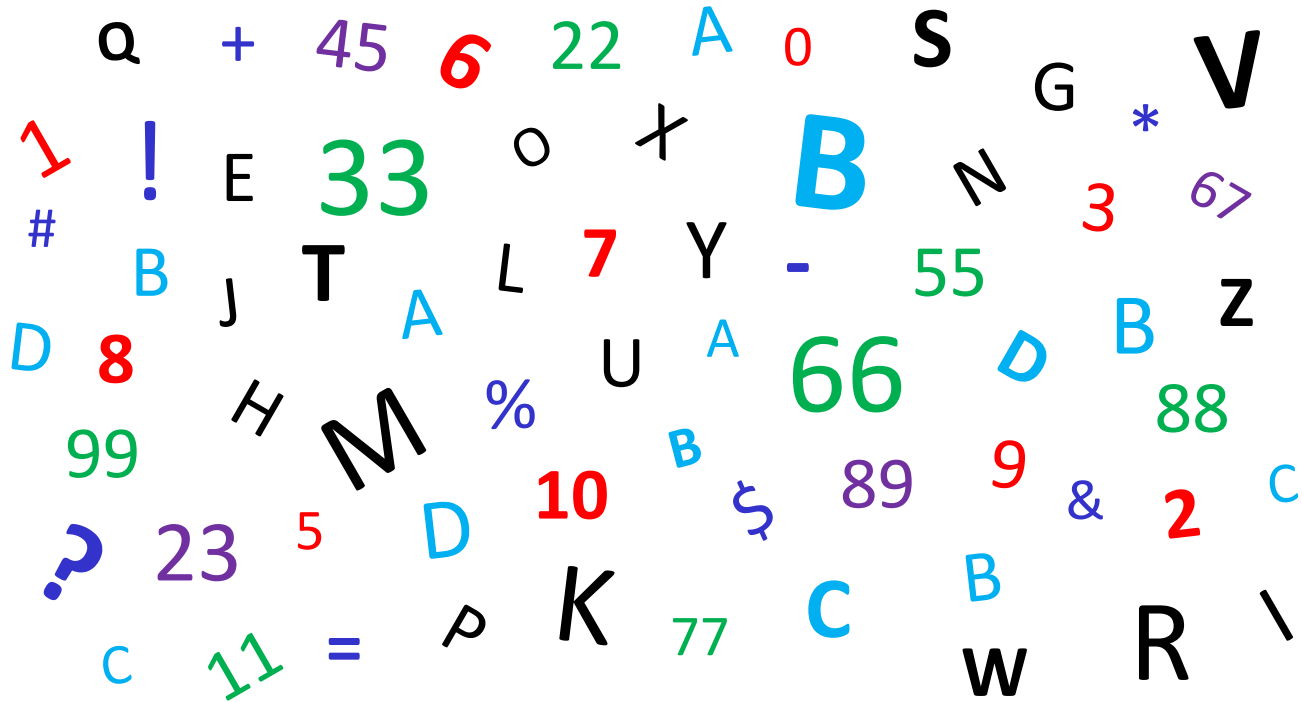
How Quick Can You Do Your Job?





# 5S

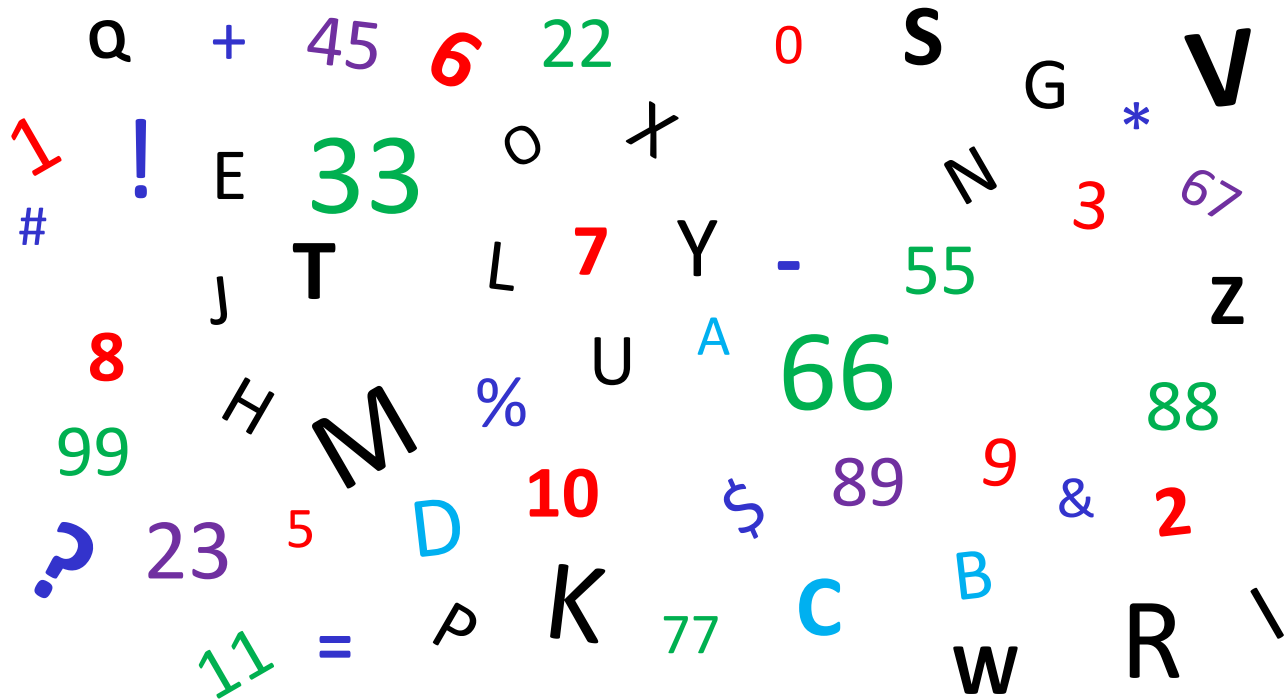
How Quick Can You Do Your Job?





# 5S

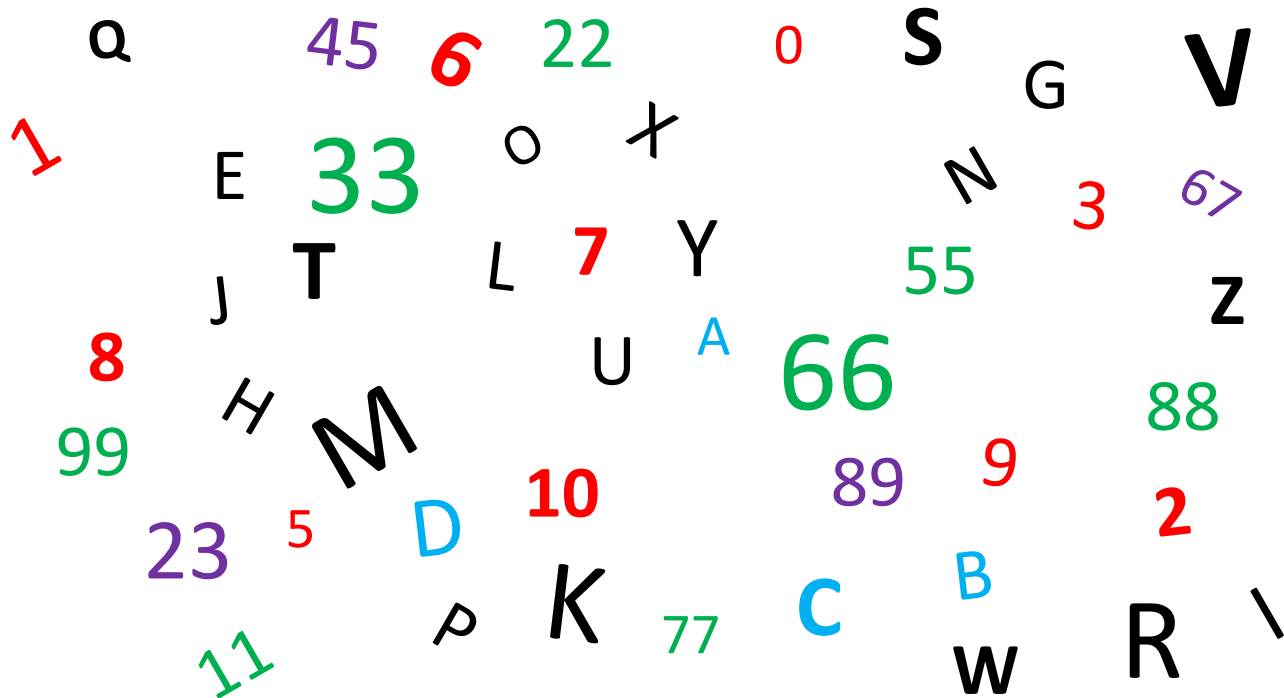
How Quick Can You Do Your Job?





# 5S

How Quick Can You Do Your Job?

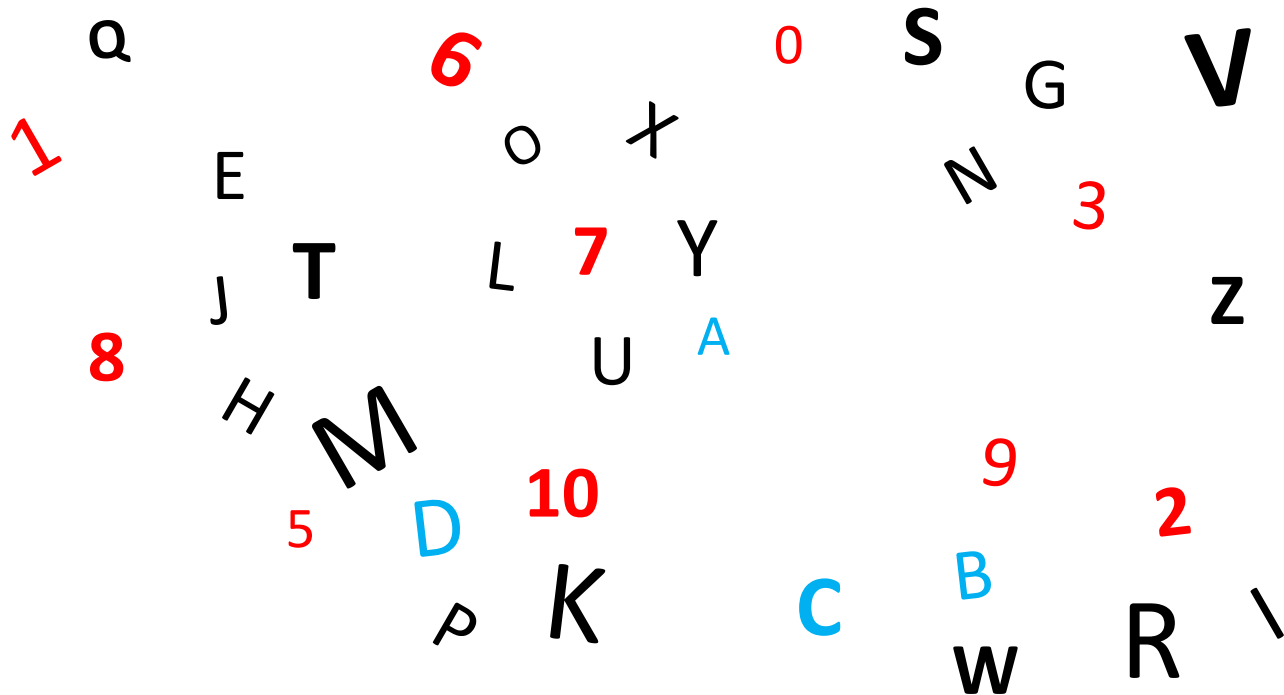






# 5S

How Quick Can You Do Your Job?





# 5S

How Quick Can You Do Your Job?

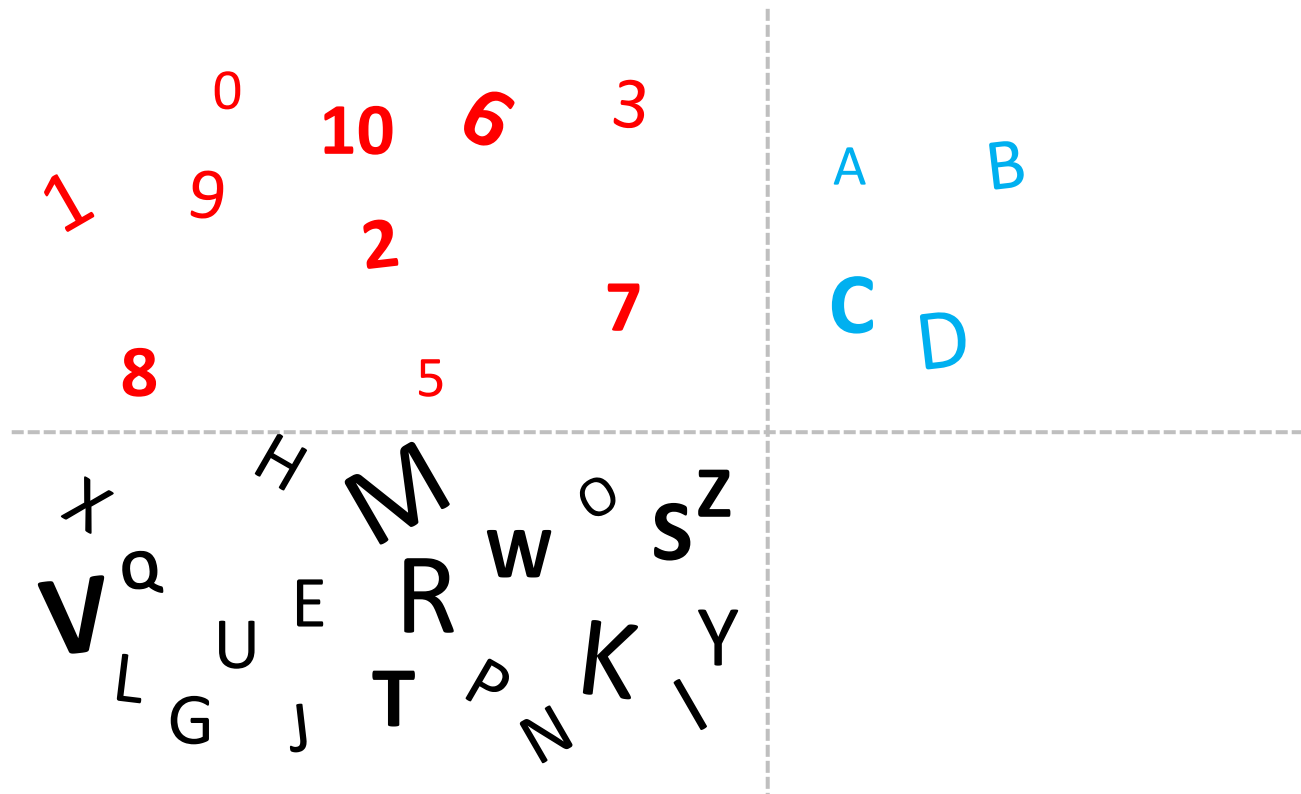
A word search puzzle grid with letters and numbers scattered across it. The grid is divided into four quadrants by a vertical and a horizontal dashed line. Numbers are placed in various positions, some in red and some in blue. Letters are scattered throughout the grid.

Q		6		0	S		V
1	E		O	X		G	
	J	T	L	7	Y	N	3
8	H		U	A			Z
	M						
	5	D	10		9		
	P	K			2		
				C	B		
				W	R		I



# 5S

How Quick Can You Do Your Job?



# 5S



How Quick Can You Do Your Job?

A	B	C	D	E		G	H
I	J	K	L	M	N	O	P
Q	R	S	T	U	V	W	X
Y	Z	0	1	2	3		5
6	7	8	9	10			



# 5S

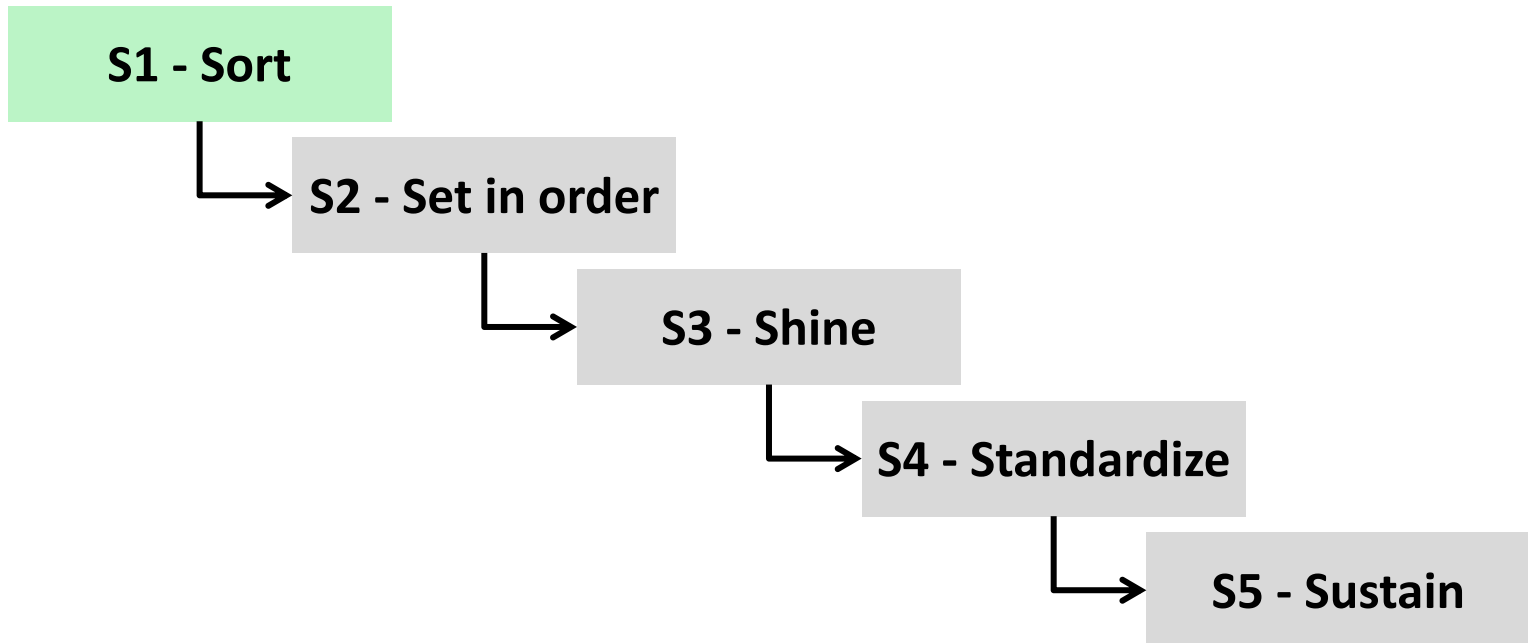
How Quick Can You Do Your Job?

Now, link the numbers from 1 to 10 in ascending order

A-H	A	B	C	D	E		G	H
I-P	I	J	K	L	M	N	O	P
Q-X	Q	R	S	T	U	V	W	X
Y-5	Y	Z	0	1	2	3		5
6-10	6	7	8	9	10			

# 5S

Sort / *SEIRI*



# 5S

## Sort / *SEIRI*

Refers to the practice of going through all the items in the workplace and keeping only what is actually **needed**



S1

S2

S3

S4

S5

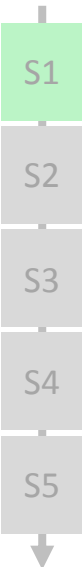


# 5S

Sort / *SEIRI*

Items which are excess to requirements should be either **stored offsite** or **discarded**

Items mean . . .





# 5S

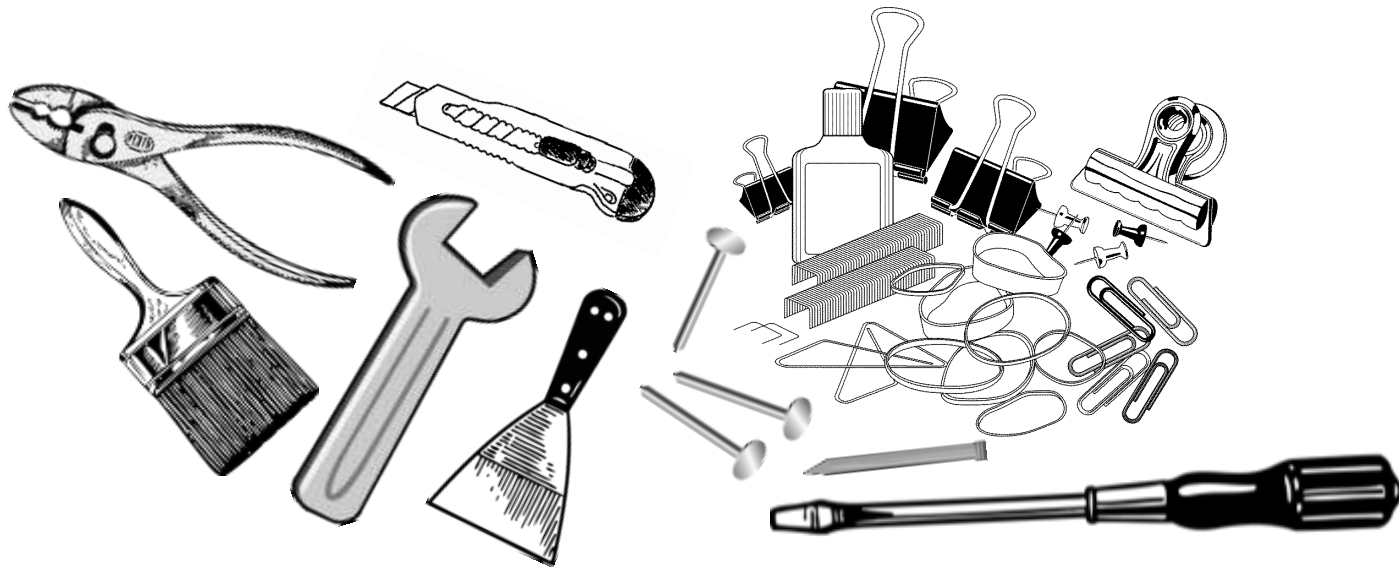
## Sort / SEIRI

These items  
may be:

Used a lot

Used less  
frequent

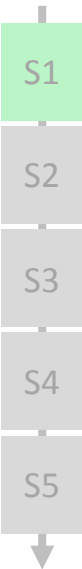
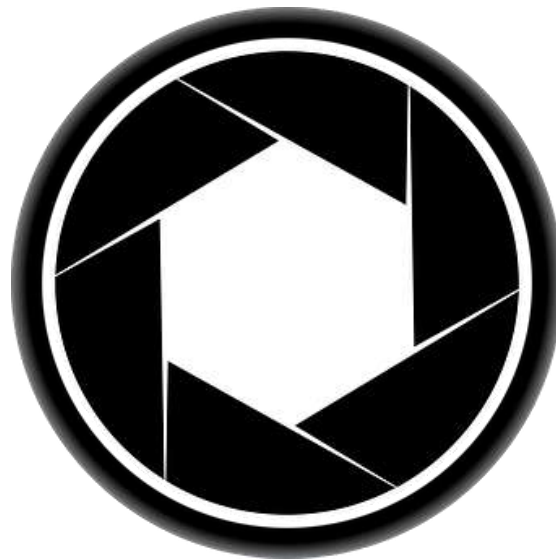
Never be used



# 5S

Sort / *SEIRI*

The **GOAL** is to clear the area from distractions to concentrate on what will remain in the workplace



# 5S

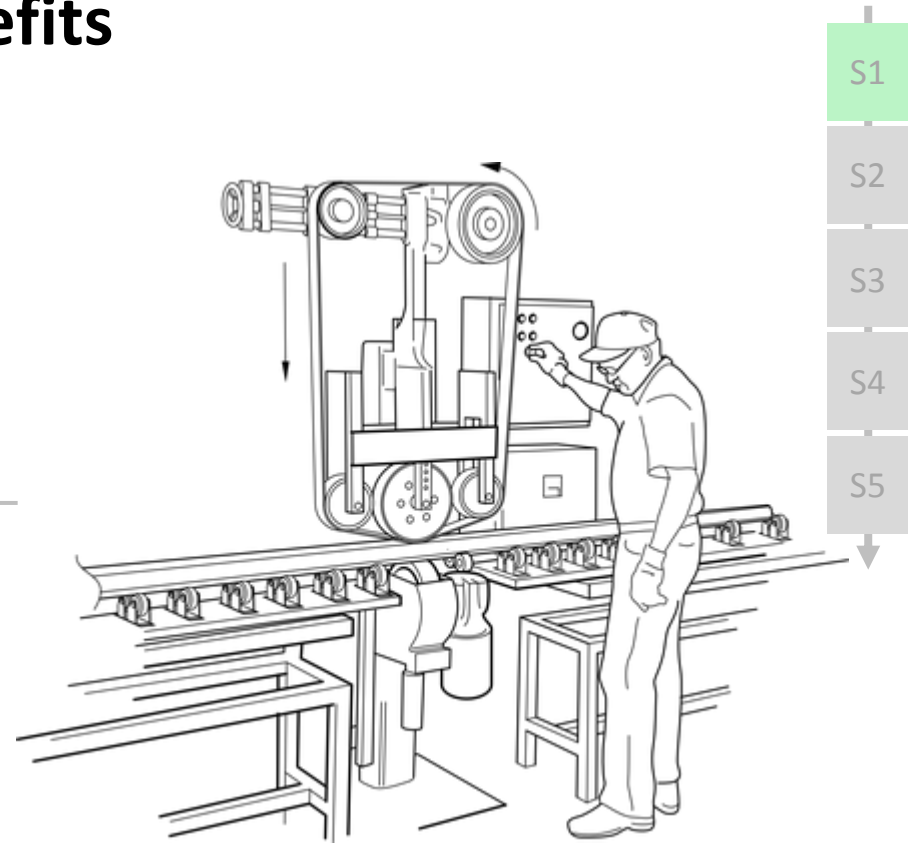
## Benefits

Less clutter

Less wasted time

Frees up space

Creates a more streamlined workplace



# 5S

## What to Sort?

Tools and equipment

Dies, jigs and fixtures

Materials & packaging

Machine parts

Measuring instruments

Stationery items

Documents & papers

Magazines & books

Clothes & consumables

Cleaning tools & materials



S1

S2

S3

S4

S5

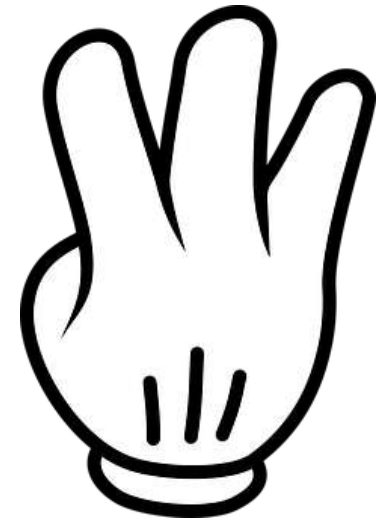


# 5S

## Quantity Does Matter

**ASK YOURSELF:** What do I need to do my work?

**THEN ASK:** How many do I need?



S1

S2

S3

S4

S5



# 5S

## Sorting Strategies

**Inspect** all items in the workplace then define what is necessary to perform the work



Keep only what is needed and remove everything else

S1

S2

S3

S4

S5



# 5S

## Remove items which are . . .

Unusable

Occasionally used

Broken / defected

Obsolete / aged

Redundant

Expired



S1

S2

S3

S4

S5



# 5S

## Example of items that need to be removed . . .

Broken tools, supplies or inspection equipment

Non-working electrical tools and equipment

Defective and excess spare parts

Unneeded items that accumulate

Old rags and other cleaning supplies

Unneeded files, paperwork and manuals

Outdated posters, signs and memos



S1

S2

S3

S4

S5



# 5S

## Sort Strategies

Define **standards** for eliminating unnecessary items

Define **standards** for waste disposal



S1

S2

S3

S4

S5



# 5S

## Sort Strategies

Don't forget computer files and emails

File **everyday**

Archive or delete files that are no longer needed



S1

S2

S3

S4

S5



# 5S

## ASK . . .

Is the directory structure simple?

Can you find the files easily?

Do you regularly clear out unnecessary information?



S1

S2

S3

S4

S5



# 5S

## Remember . . .

No waste in aisles

No tools and equipment on floor

Don't forget rest areas, test facilities and the outside area



S1

S2

S3

S4

S5

# 5S

## Remember . . .

No unnecessary items on shelves and workstations

No unnecessary documents in files or on shelves

Look inside and at the top of  
racks and cabinets



S1

S2

S3

S4

S5



# 5S

## Red Tag Technique

A labeling tool used to highlight what is necessary in an area



The goal is to determine if anyone thinks an item is necessary and in what quantity

S1

S2

S3

S4

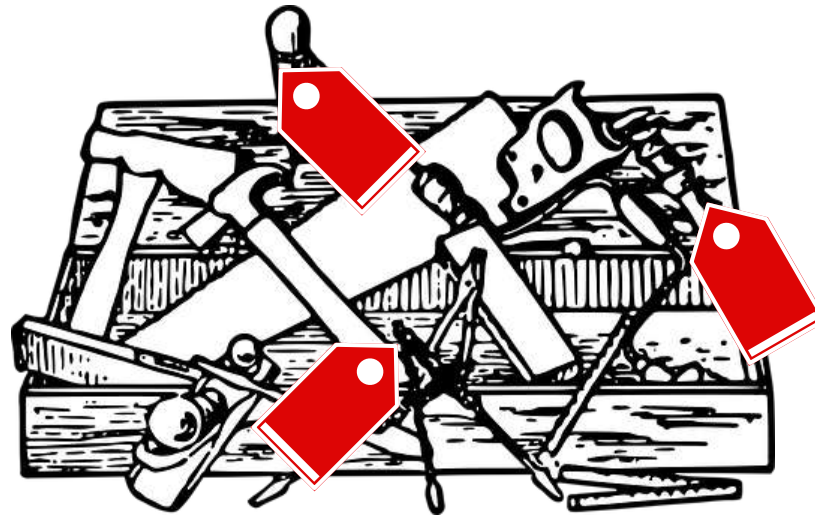
S5



# 5S

## Red Tag Technique

Items are red tagged for a **limited period** of time during which their usage is evaluated



S1

S2

S3

S4

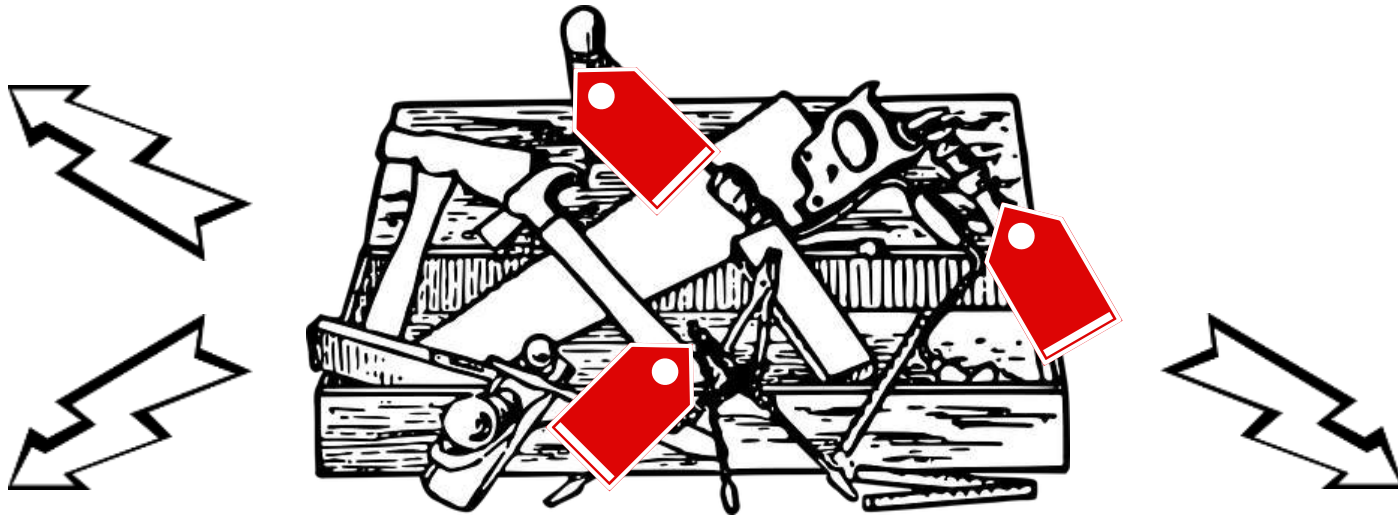
S5



# 5S

## Red Tag Technique

After one week or two, the items that are not used or pulled from the area should be **relocated** or **get rid of**



This will result in a **less cluttered workplace**

S1

S2

S3

S4

S5



# 5S

## Red Tag Approach

**Set a time-frame** to evaluate the items in the workplace

**Identify** a temporary holding area to store the red tagged items

**Throw away** obvious rubbish

**Relocate or discard** the items that are obviously not required

S1

S2

S3

S4

S5



# 5S

## Red Tag Approach

Go through the area and red **tag** the potentially unneeded items

**Move** these items to the temporary holding area

**Evaluate** the usage of the red tagged items during the predefined time-frame

S1

S2

S3

S4

S5



# 5S

## Red Tag Approach

Evaluate the usage of the red tagged items . . .

**Return back** the items if determined necessary

**Discard** (or *sell*) the items if determined unnecessary

Move the occasionally used **outside** the work area

S1

S2

S3

S4

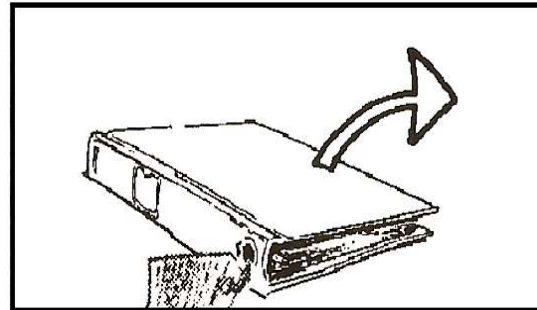
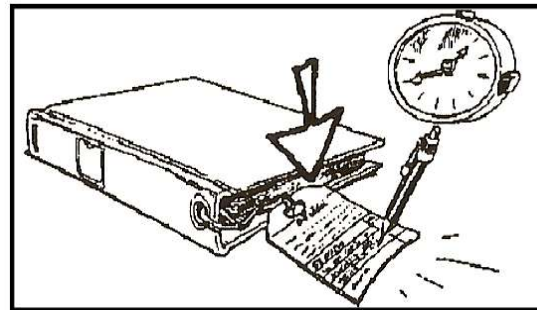
S5



# 5S

## Red Tag Approach

**Not needed? Red tag it!**



S1

S2

S3

S4

S5



# 5S

**RED TAG**

Area found: \_\_\_\_\_

Item name: \_\_\_\_\_

Quantity: \_\_\_\_\_ Date: \_\_\_\_\_

Tagged by: \_\_\_\_\_

**Category:**

<input type="checkbox"/> Tool	<input type="checkbox"/> Equipment
<input type="checkbox"/> Raw material	<input type="checkbox"/> Packaging
<input type="checkbox"/> Machine part	<input type="checkbox"/> Instrument
<input type="checkbox"/> Stationary	<input type="checkbox"/> Documentation
<input type="checkbox"/> Furnishing	<input type="checkbox"/> Consumable
<input type="checkbox"/> Other _____	

(MFG.) TAG#: 159392 [www.citoolkit.com](http://www.citoolkit.com)

**RED TAG**

**Reason for Red Tag:**

<input type="checkbox"/> Unusable	<input type="checkbox"/> Occasionally used
<input type="checkbox"/> Defected	<input type="checkbox"/> Obsolete/ Aged
<input type="checkbox"/> Redundant	<input type="checkbox"/> Expired
<input type="checkbox"/> Other _____	

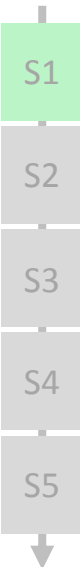
**Action to Take:**

<input type="checkbox"/> Return back	<input type="checkbox"/> Sell
<input type="checkbox"/> Discard	<input type="checkbox"/> Scrap
<input type="checkbox"/> Relocate _____	
<input type="checkbox"/> Other _____	

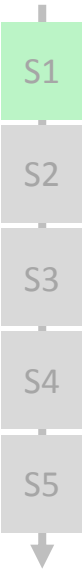
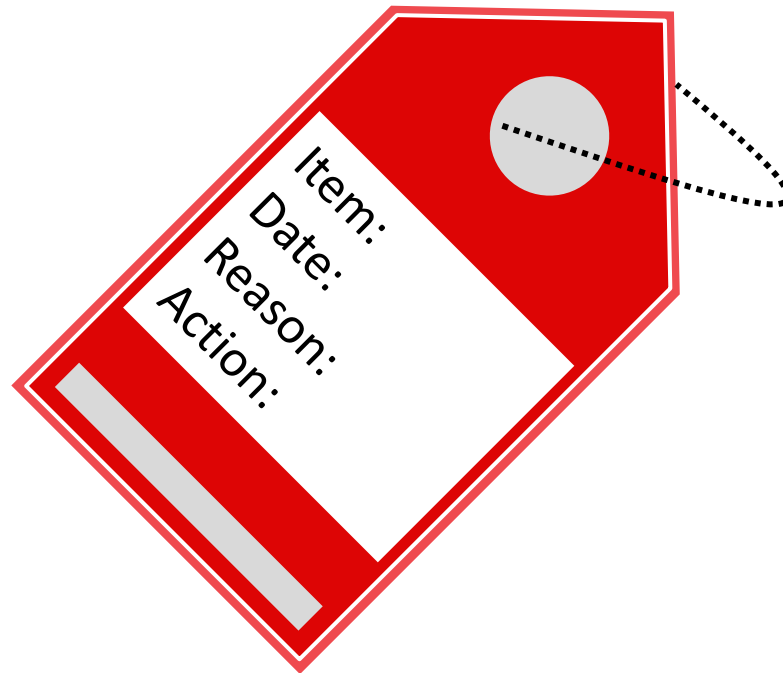
**Supporting Information:**

\_\_\_\_\_

\_\_\_\_\_



# 5S



Minimum Attributes

# 5S

## Sort and Store By Frequency of Use

PRIORITY	FREQUENCY OF USE	HOW TO USE
<b>Low</b>	<ul style="list-style-type: none"><li>Once per year or more.</li><li>Less than once a year.</li></ul>	<ul style="list-style-type: none"><li>Store away from workplace.</li><li>Discard if not needed.</li></ul>
<b>Average</b>	<ul style="list-style-type: none"><li>Once per month.</li><li>Once per week.</li></ul>	<ul style="list-style-type: none"><li>Store offline.</li></ul>
<b>High</b>	<ul style="list-style-type: none"><li>Once per day.</li></ul>	<ul style="list-style-type: none"><li>Locate at the workplace.</li></ul>

S1

S2

S3

S4

S5



# 5S

## Sorting Summary

“Things accumulate”

“Remove what is not required”

“Keep only those items required TODAY”

“For more effective use of time and space”

“These strategies break the ‘Just In Case’ mentality”

“When in doubt, use the red tag technique”

S1

S2

S3

S4

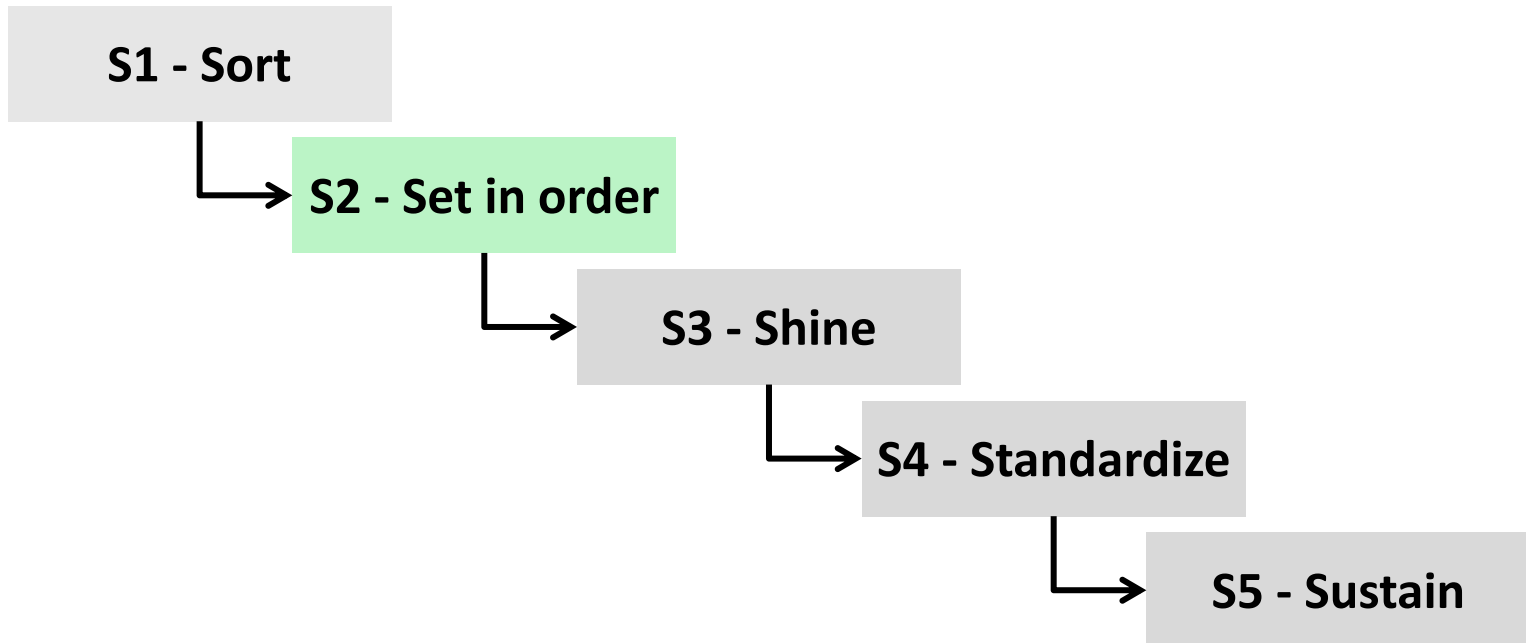
S5





# 5S

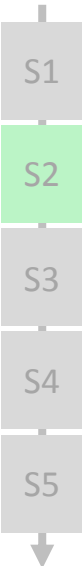
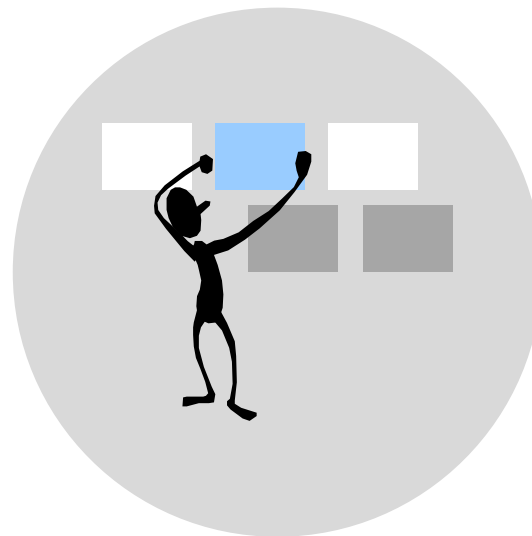
## Set in Order / *SEITON*



# 5S

## Set in Order / *SEITON*

Refers to the practice of **arranging** the **required** items

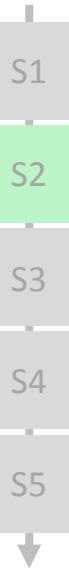
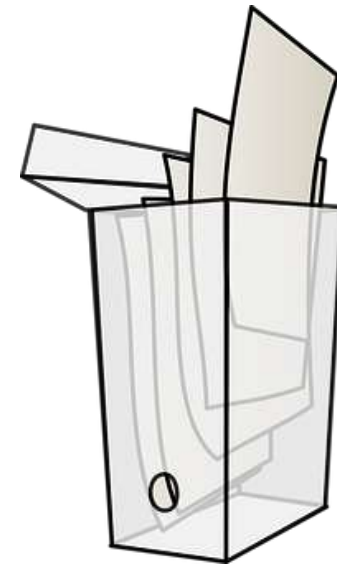
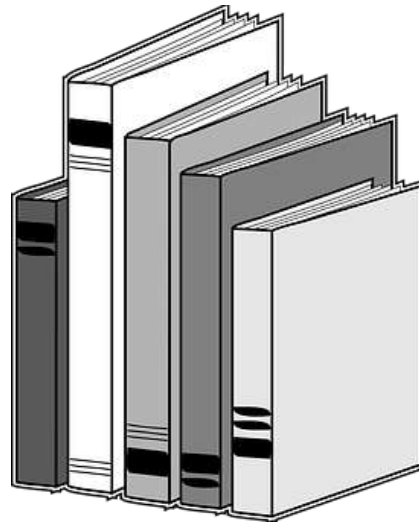
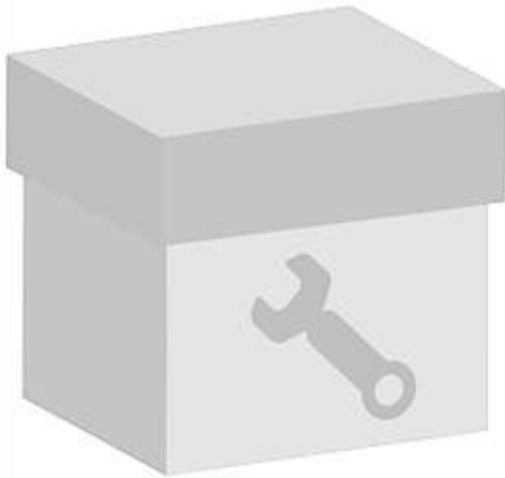


Anyone should locate and access them easily

# 5S

## Set in Order / *SEITON*

It defines where and how the items to perform the work should be **arranged**



# 5S

## Set in Order / *SEITON*

Once you have eliminated all the unneeded items, **get back** to the left items and **organize** them in a way that makes it easy to find what is needed

It should be obvious at a glance when an item is not in its designated place



S1

S2

S3

S4

S5



# 5S

## Set in Order / *SEITON*

Think about how you perform your job, and how adjusting the location of your equipment and tools, or altering the work flow, could make you more productive with less ergonomic stress.



S1

S2

S3

S4

S5



# 5S

## Benefits

Items are easier to be found

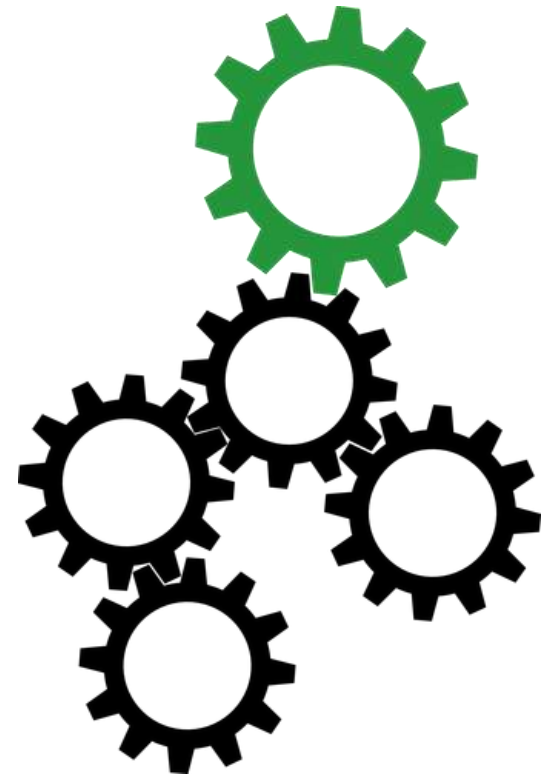
Increased effectiveness in the work area

Improved safety and the work environment

Improved workflow

Reduced wasted time and motion

Makes visual management possible



# 5S

**Ask yourself:** Where should I locate this item?

Shelves / racks

Cabinets

Disks / drawers

On walls / notice boards

Floor

Online or offline



S1

S2

S3

S4

S5

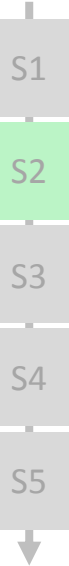
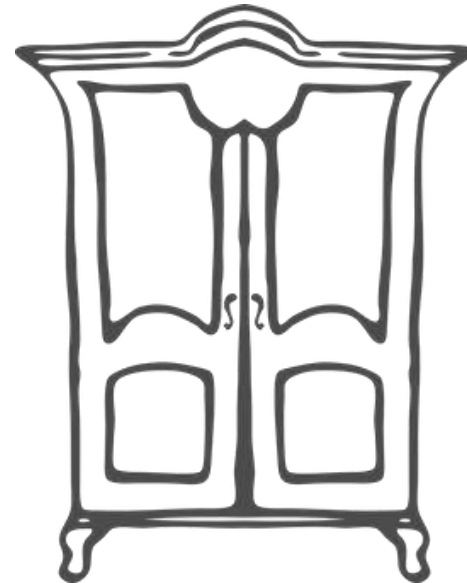


# 5S

## Set In Order Strategies

Assign **positions** for all equipment, tools, parts and materials

Organize items in modular cabinets, storage bins, shelves and racks

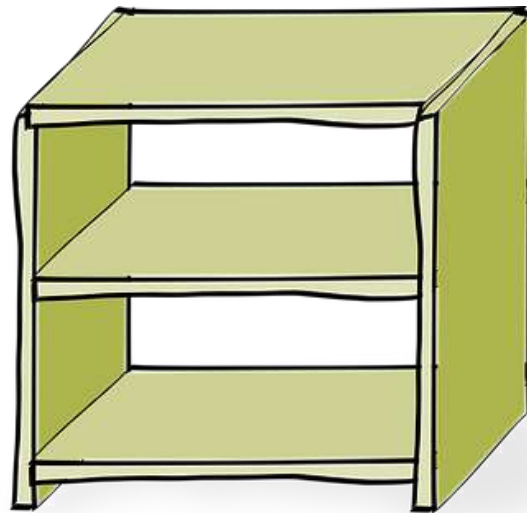




# 5S

## Set In Order Strategies

Change from a closed to an **open storage system**



S1

S2

S3

S4

S5



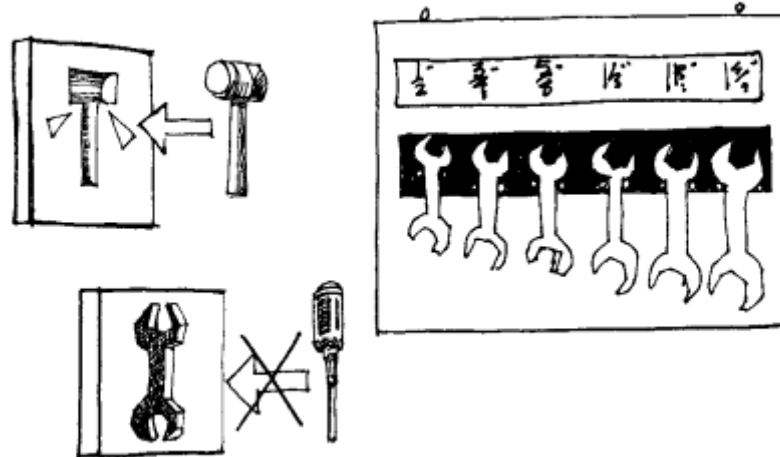
# 5S

## Set In Order Strategies

Place items **where** they are used

Classify and store tools and parts by **frequency of use**

Place shared tools on **shadow boards**



S1

S2

S3

S4

S5



# 5S

## Set In Order Strategies

Use different colors or **color coding** to assign tools for different departments



S1

S2

S3

S4

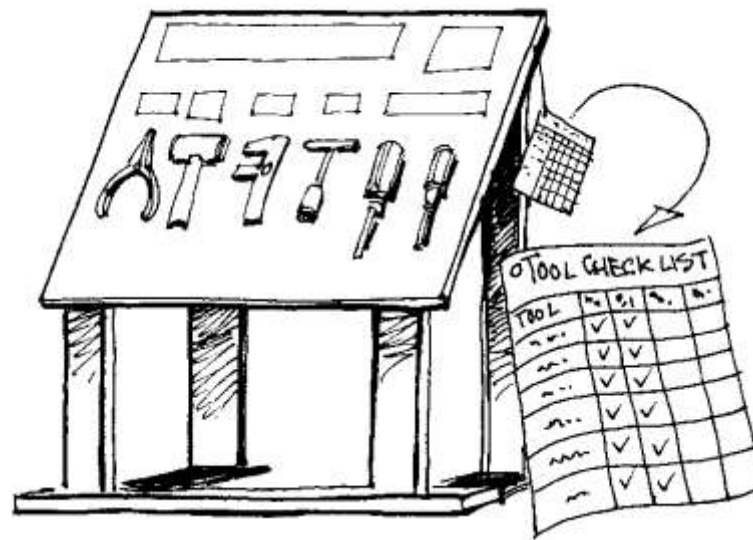
S5



# 5S

## Set In Order Strategies

Use of **tool checklist** to ensure all the proper tools are available



S1

S2

S3

S4

S5



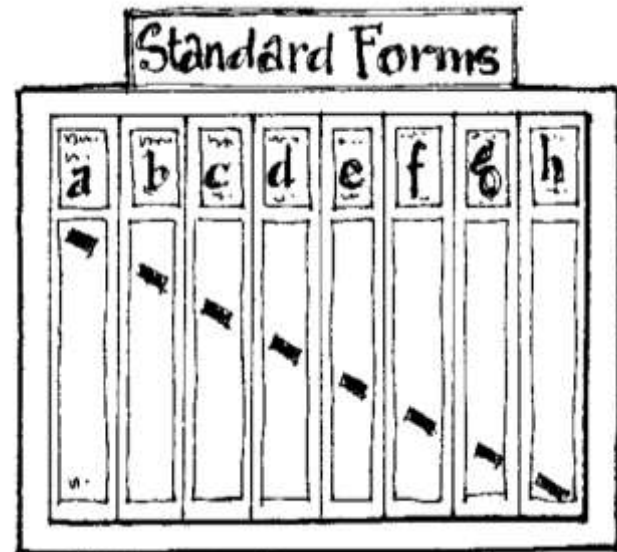
# 5S

## Set In Order Strategies

Use **tapes** and labels

**Label** files and folders

Label shelves and books so that they are easy to identify and return to their proper place



S1

S2

S3

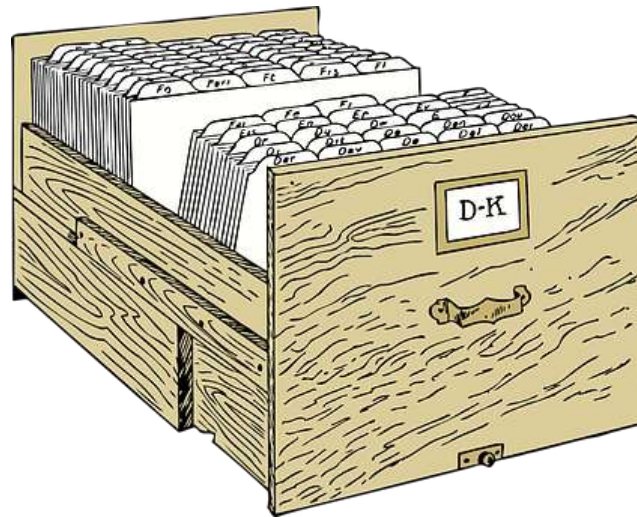
S4

S5

# 5S

## Set In Order Strategies

**Label** cabinets, storage bins, drawers, shelves and racks



S1

S2

S3

S4

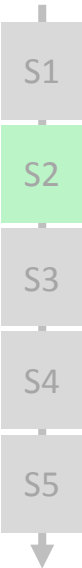
S5



# 5S

## Set In Order Strategies

Provide **shelves** for frequently used manuals, books & catalogs



Place manuals and standards by machines for easy reference

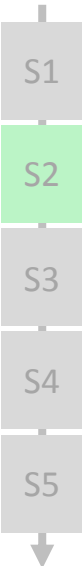
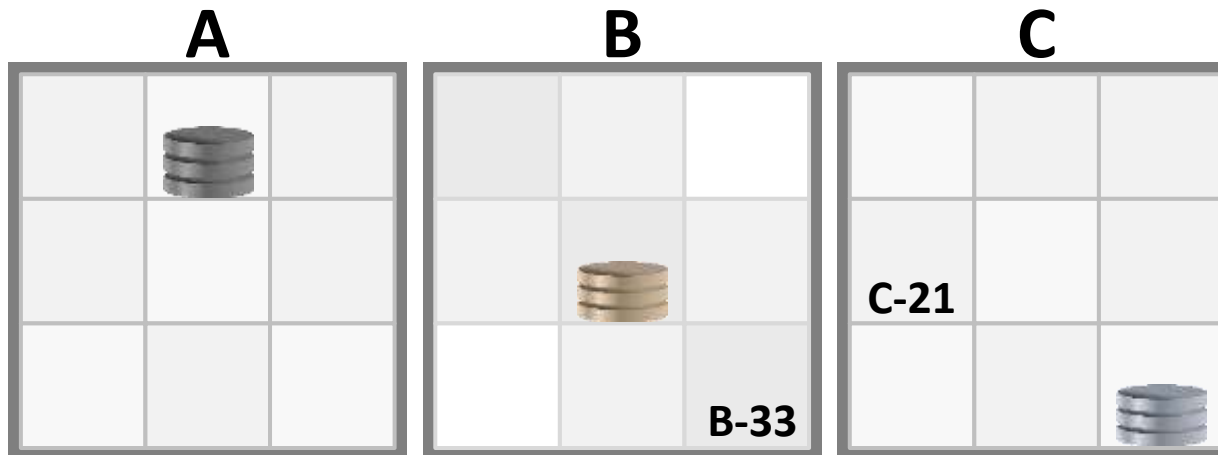
# 5S

## Set In Order Strategies

Use the **three-point** identification system (**rack-row-column**)

Arrange things for **convenience**

Place frequently used items in the **'strike zone'**



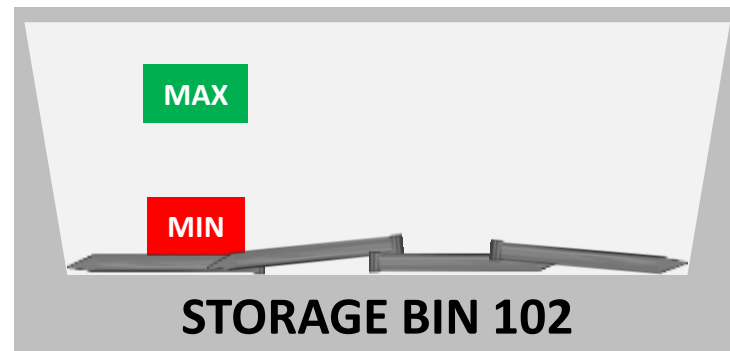
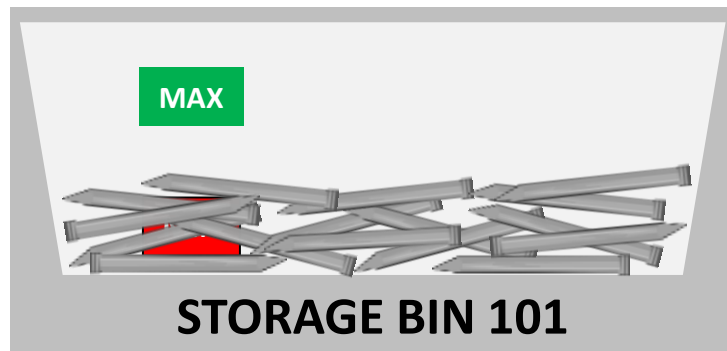
Sometimes **aisles** are included in the identification



# 5S

## Set In Order Strategies

Indicate minimum and maximum levels clearly to see exactly how many stock items are left at a glance

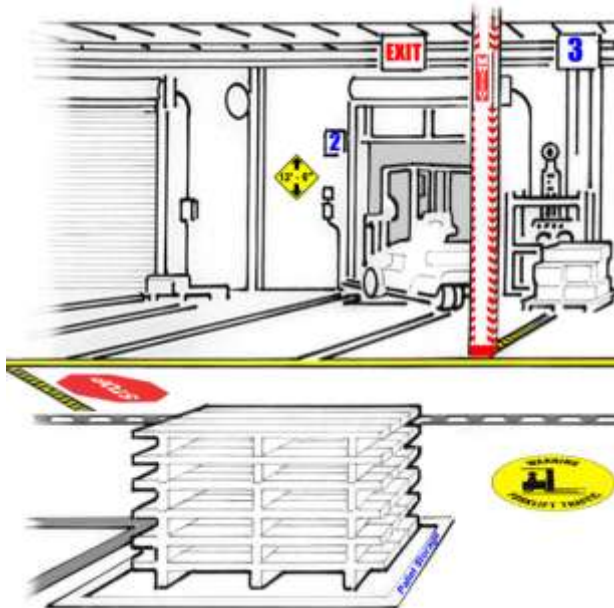




# 5S

## Set In Order Strategies

Mark and label work areas, storage areas, stacking areas, and the locations of safety equipment



### Question:

Some painting is often better done in later stages, why?

S1

S2

S3

S4

S5

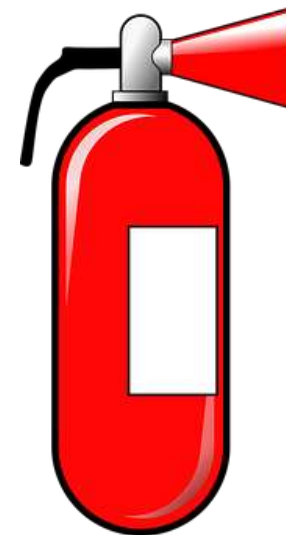
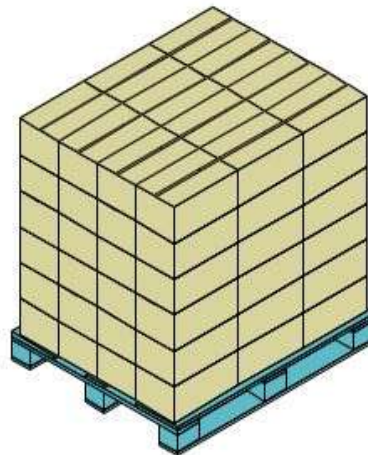
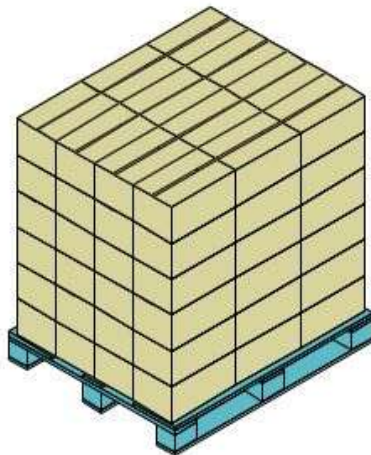


# 5S

## Set In Order Strategies

Ensure **safety equipment** easily accessible

Stack pallets correctly . . . Ensure **FIFO** is being followed



S1

S2

S3

S4

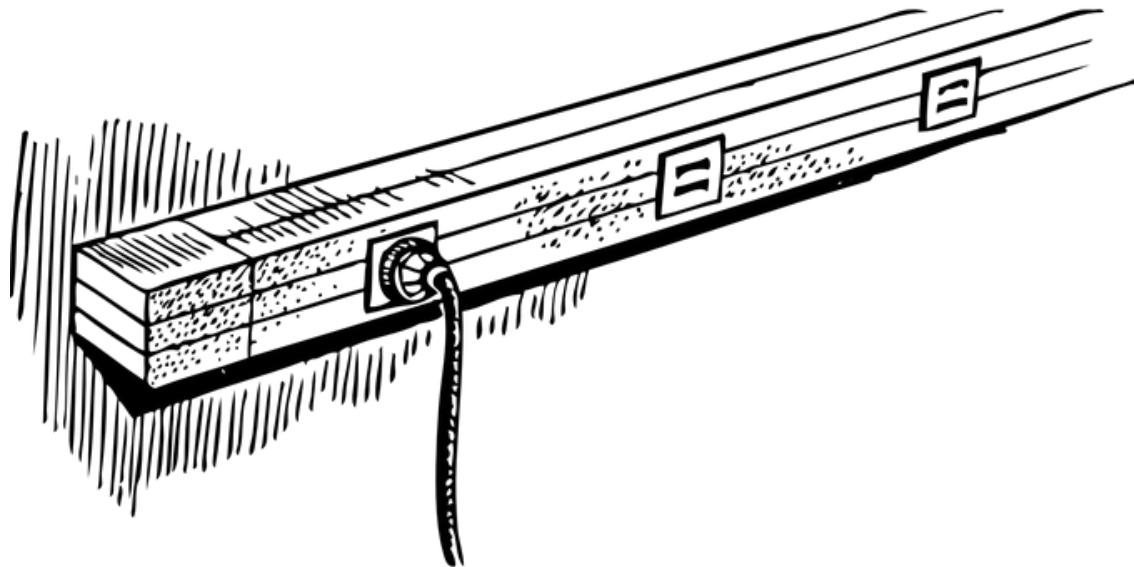
S5



# 5S

## Set In Order Strategies

Improve **wiring** organization



S1

S2

S3

S4

S5

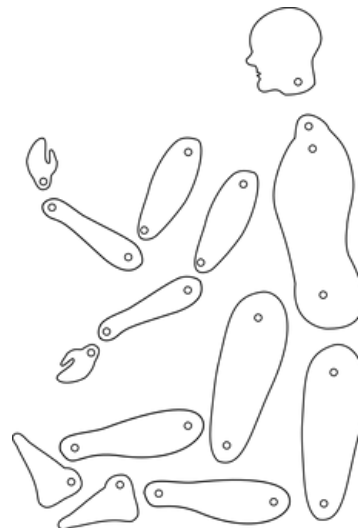


# 5S

## Set In Order Strategies

Improve **ergonomics**

Consider long-run and short-run ergonomic issues



S1

S2

S3

S4

S5



# 5S

## Set In Order Strategies

Use **functional carts** when conducting changeovers, maintenance and cleaning



S1

S2

S3

S4

S5



# 5S

## Set In Order Strategies

15 years  
service



New  
Starter

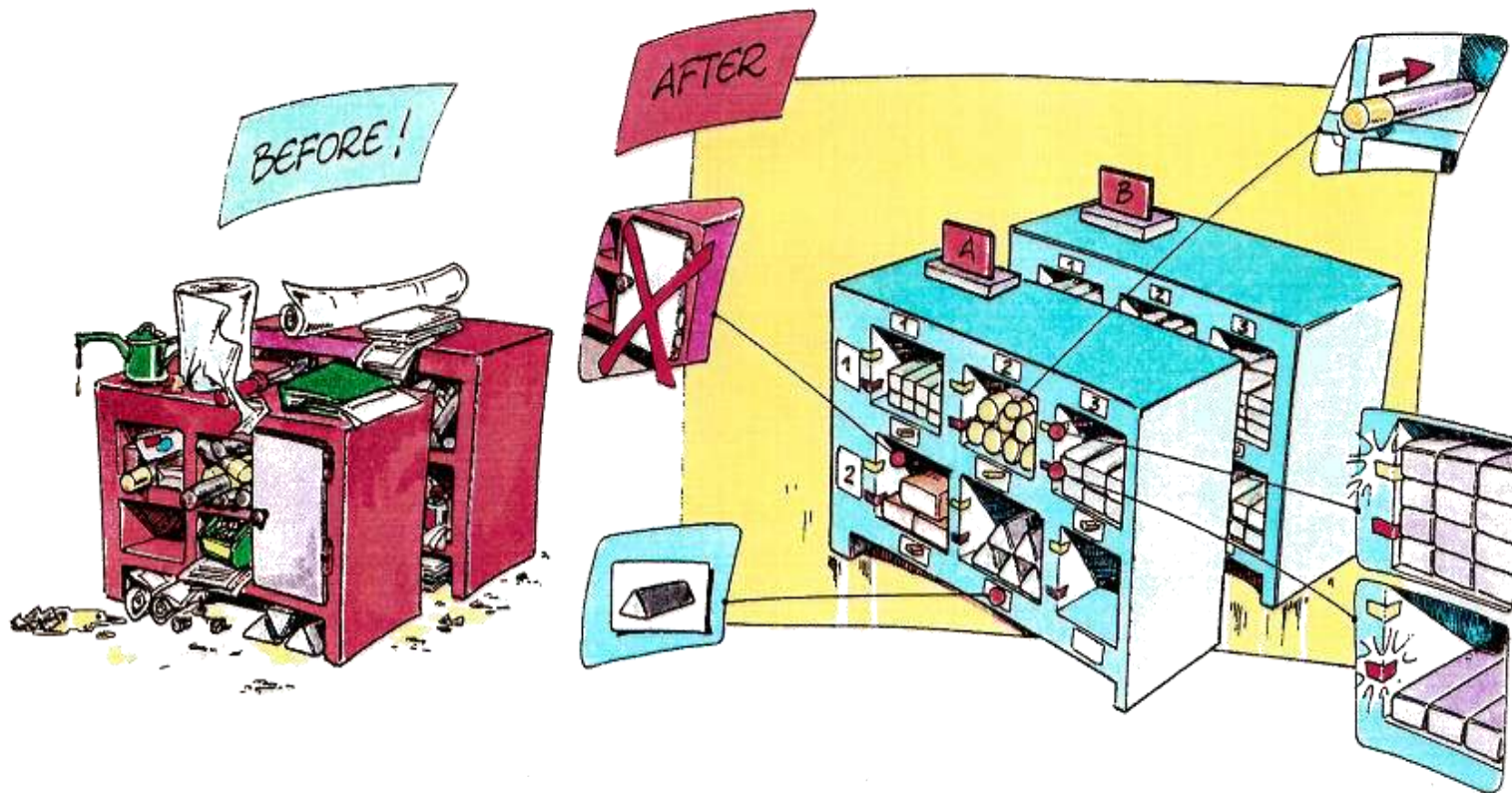


Make things easy for this guy

- S1
  - S2
  - S3
  - S4
  - S5
- ↓

# 5S

## Setting In Order Strategies



S1

S2

S3

S4

S5



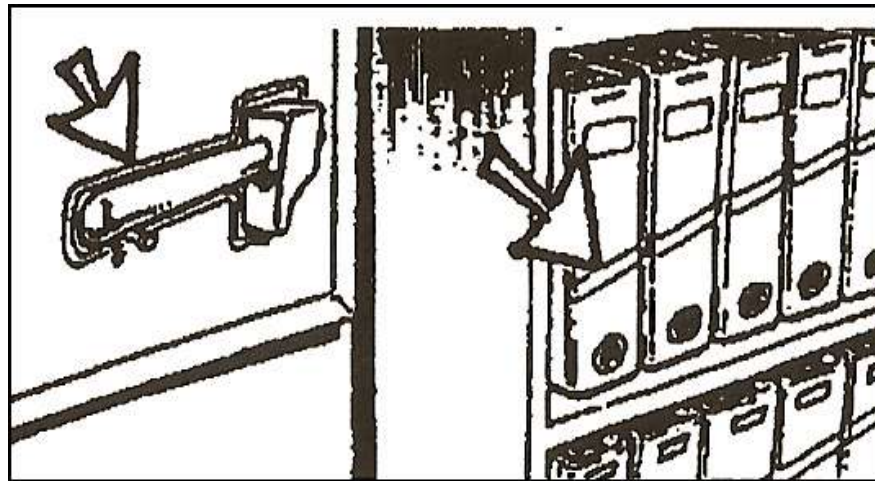


# 5S

## Set in Order Summary

“Everything is needed needs a place”

“A place for everything and everything in its place”



S1

S2

S3

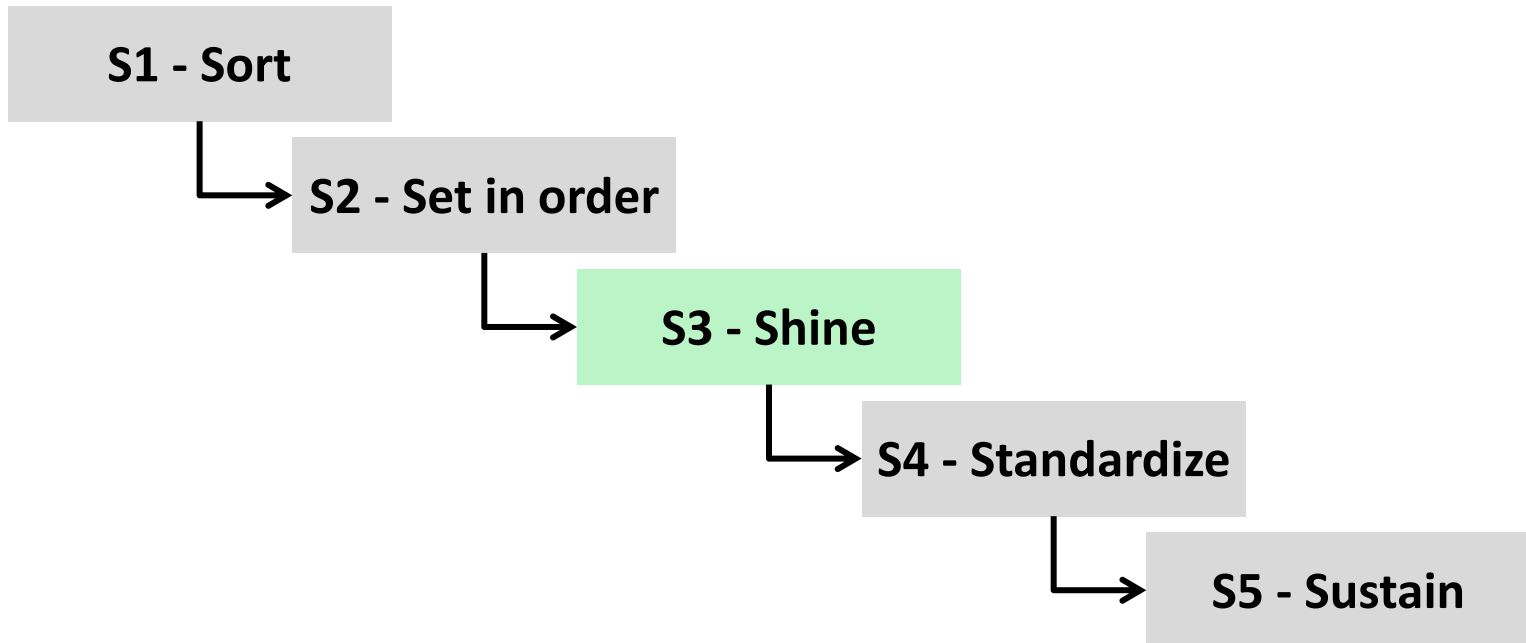
S4

S5



# 5S

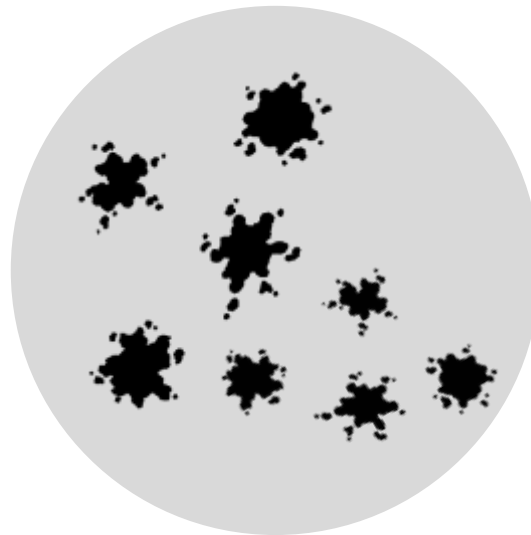
Shine / *SEISOU*



# 5S

Shine / *SEISOU*

Aims of creating a clean workplace without rubbish,  
dirt or dust



S1

S2

S3

S4

S5



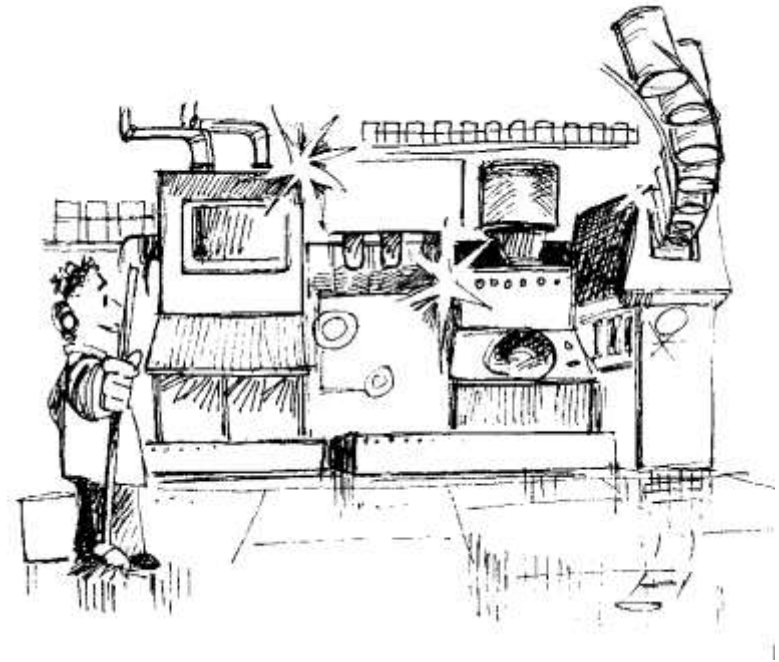
# 5S

## Benefits

It is easier to spot **problems** if the area is clean and tidy

Helps in creating **ownership** of the work area

Makes the work area **safer** and more pleasant to work in



S1

S2

S3

S4

S5



# 5S

## Benefits

Enable easy identification of **abnormalities** such as:

Repeat contamination

Oil spills

Vibration & abnormal sounds

Air leaks



What else?

S1

S2

S3

S4

S5



# 5S

## Benefits

These issues if left unattended could lead to equipment **failure** and loss of production (or service time)



**Cleaning** should be a part of the daily routine and should not be postponed to some future time

S1

S2

S3

S4

S5



# 5S

## Shine Strategies

**Eliminate** all forms of dirt, contamination and clutter

Thoroughly clean, dust, polish and sweep the work area



S1

S2

S3

S4

S5

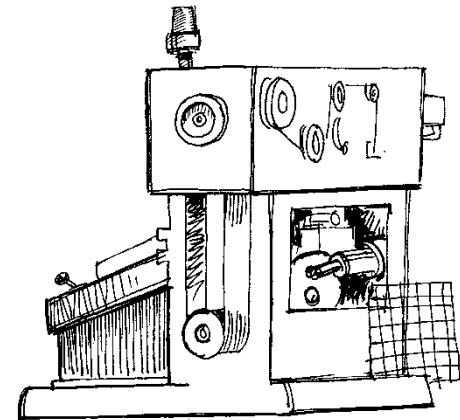


# 5S

## Shine Strategies

Clean all tools and equipment

Machines and equipment should be cleaned by people who use them



S1

S2

S3

S4

S5





# 5S

## Shine Strategies

Clean up spills on floor and walls



S1

S2

S3

S4

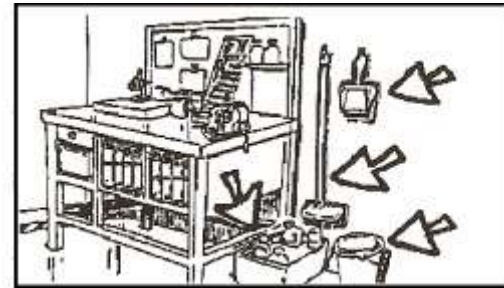
S5



# 5S

## Shine Strategies

Cleaning tools should always be easily **accessible**



S1

S2

S3

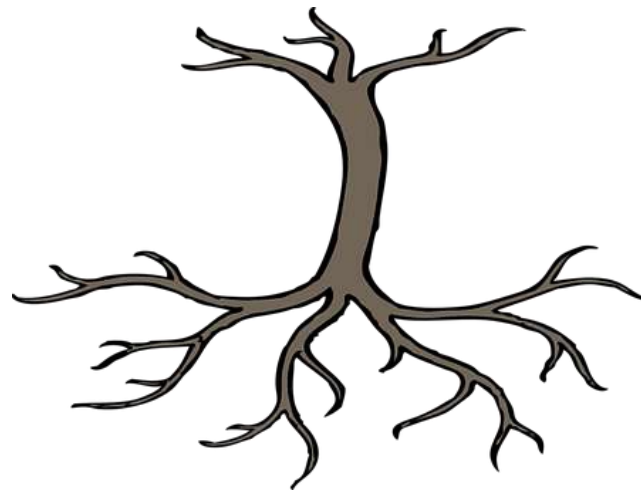
S4

S5

# 5S

## Shine Strategies

Identify and eliminate **causes** of dirt and clutter



S1

S2

S3

S4

S5



# 5S

## Shine Strategies

Identify the waste **disposal storage area** and regularly clean it



S1

S2

S3

S4

S5

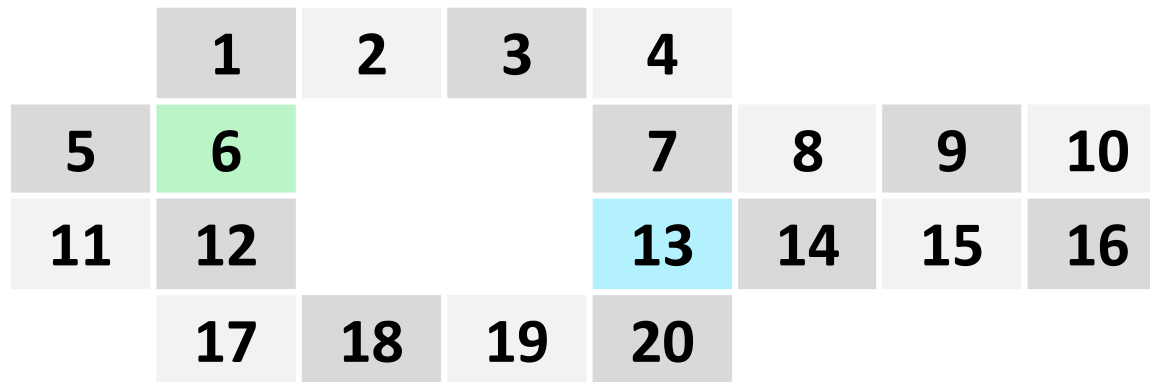


# 5S

## Shine Strategies

Divide the workplace into **zones**

**Allocate people** to take charge of each zone



S1

S2

S3

S4









S5



# 5S

## Shine Strategies

Establish a duty schedule and **assign responsibilities**

	MON	TUE	WED	THU	FRI
					
					
					
					

Create a table that shows **which** tasks must be performed, **how often**, and by **whom**

S1

S2

S3

S4

S5

# 5S

## Shine Strategies

Create **procedures** for continued daily shine processes

Use cleaning inspection **checklists**



S1

S2

S3

S4

S5



# 5S

## Shine Strategies

Ensure **floors and walls** in good condition

**Paint** floors, walls, machines and tools



S1

S2

S3

S4

S5



# 5S

## Shine Strategies

Don't forget computers, furnishings, cabinets, storage bins, workstations and display boards



- S1
  - S2
  - S3
  - S4
  - S5
- ↓

# 5S

## Shine Strategies

Use **fault identification tags** while cleaning to indicate any faults

S1

S2

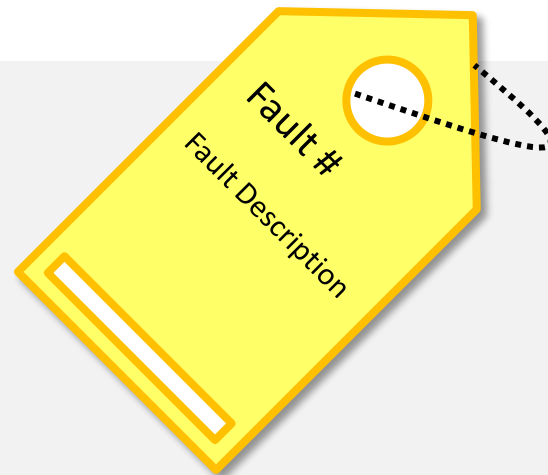
S3

S4

S5



Remove the tag when the problem is fixed



*Clean to Inspect  
Inspect to Detect  
Detect to Correct  
Correct to Perfect*

# 5S

## Shine Summary

“Eliminate **ALL spots** .. Create a spotless workplace”

“No dirty machine can produce clean products”

“See workspace through **customers eyes**”



S1

S2

S3

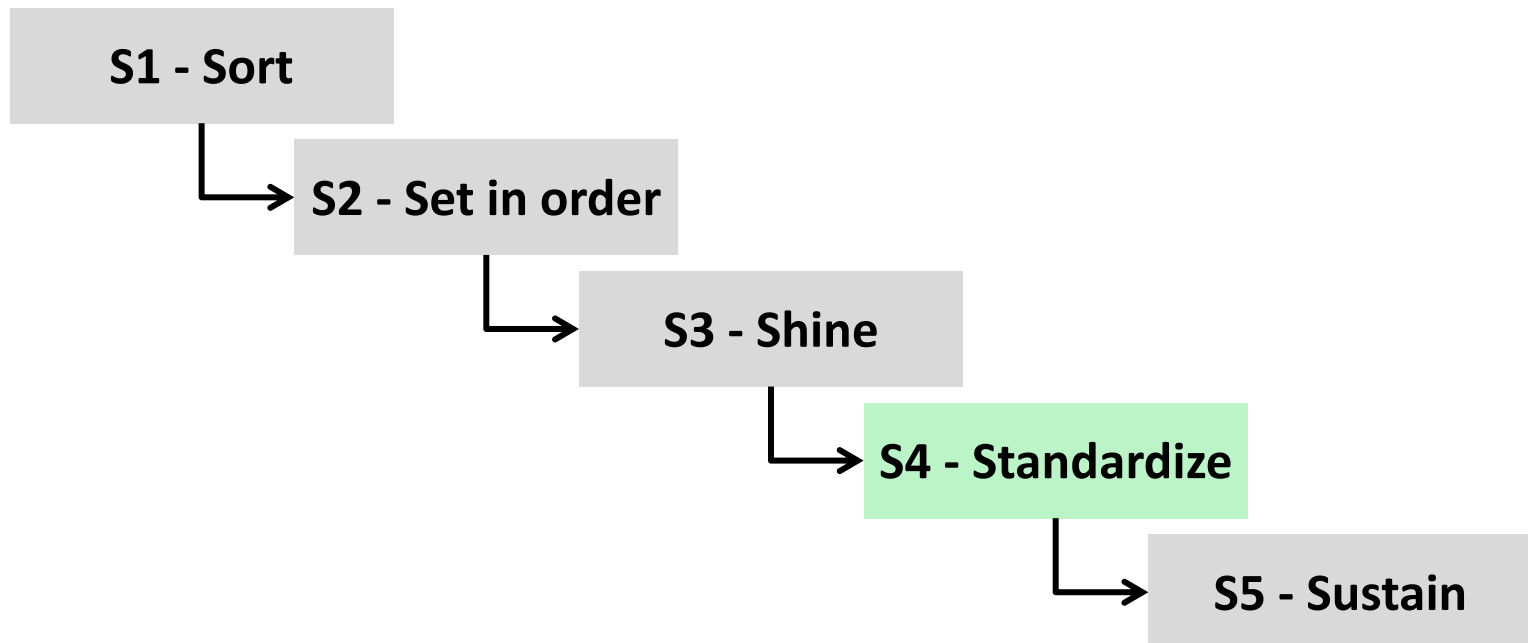
S4

S5



# 5S

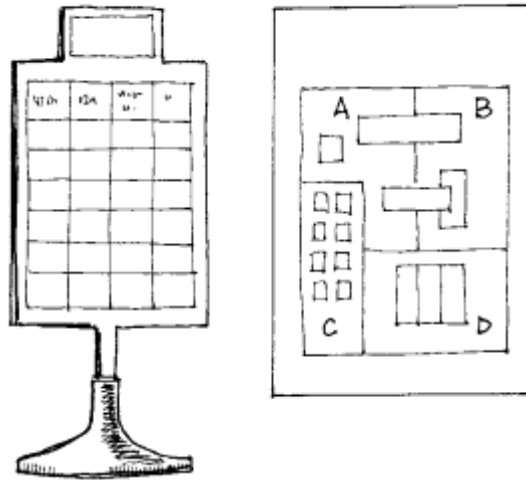
## Standardize / *SEIKETSU*



# 5S

## Standardize / *SEIKETSU*

Keeping the workplace clean and tidy is a real challenge and can only be achieved if **standards are established** and adhered to



S1

S2

S3

S4

S5

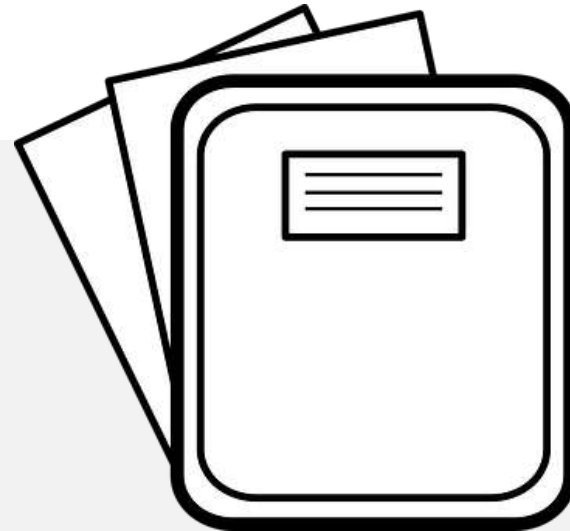


# 5S

Standardize / *SEIKETSU*

Doing the **right things right** all the time

The **communication**  
and **maintaining** of  
standards and  
expectations  
throughout the  
workplace



S1

S2

S3

S4

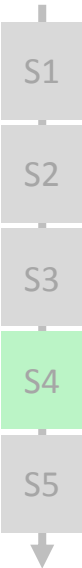
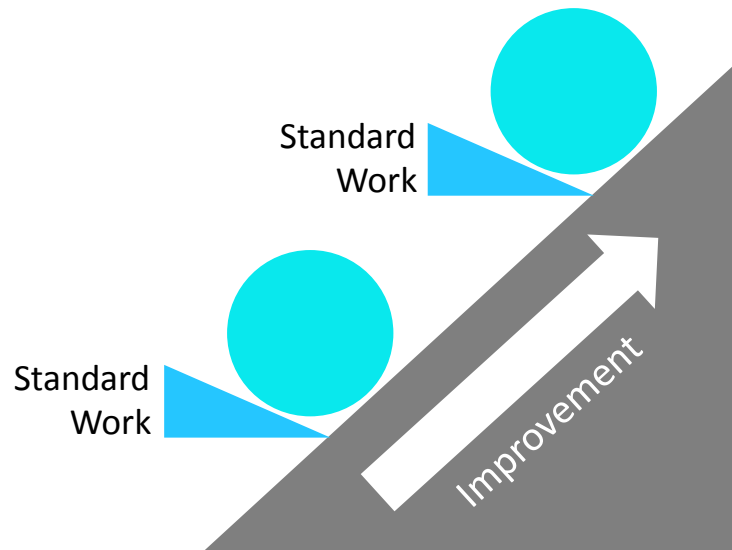
S5



# 5S

## Standardize / *SEIKETSU*

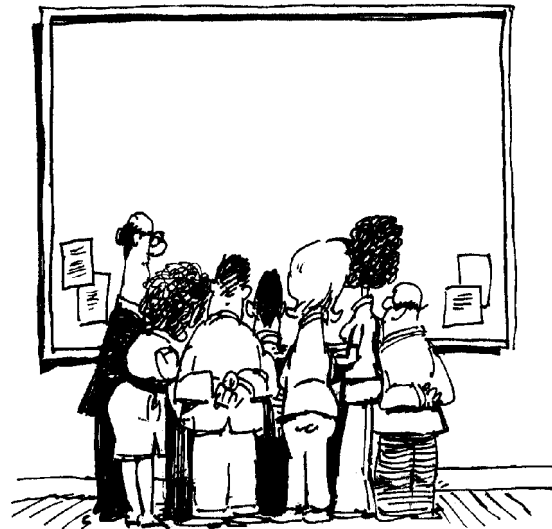
As you learn more, update and modify your standards to make the 5S practices simpler and easier



# 5S

## Standardize Strategies

Establish **procedures** and schedules to ensure the consistency of implementing the **first three 'S' practices**



S1

S2

S3

S4

S5





# 5S

## Standardize Strategies

Ensure everyone knows their **responsibilities** of performing the sorting, organizing and cleaning

Develop a **work structure** that will support the new practices

Make it **part of the daily routine**

S1

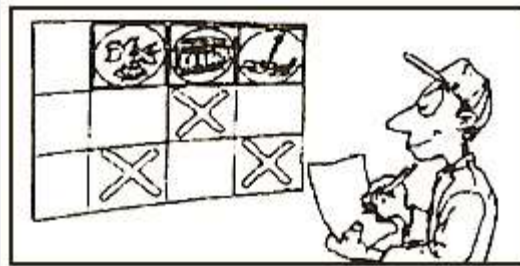
S2

S3

S4

S5

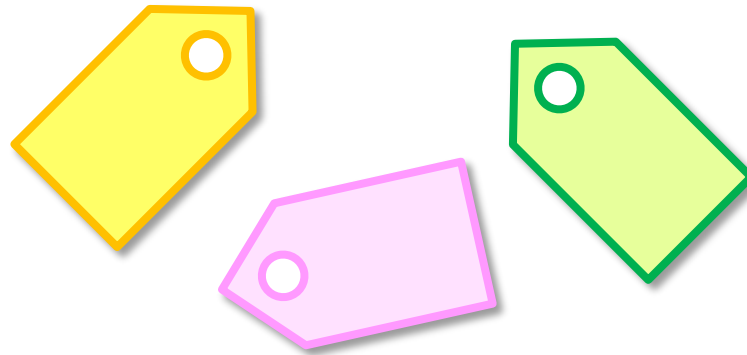
*What?*  
*When?*  
*Where?*  
*How?*



# 5S

## Standardize Strategies

Ensure **standardizing color codes**



S1

S2

S3

S4

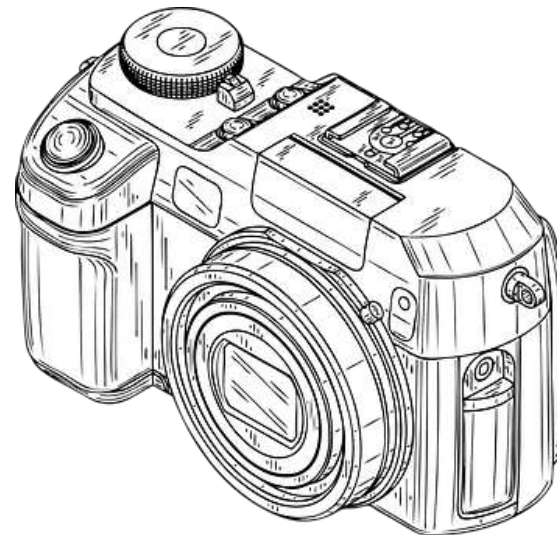
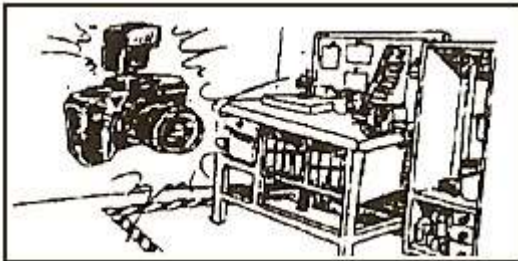
S5



# 5S

## Standardize Strategies

Use **photos** and **visual controls** to help keep everything as it should be and remind people of the standard



S1

S2

S3

S4

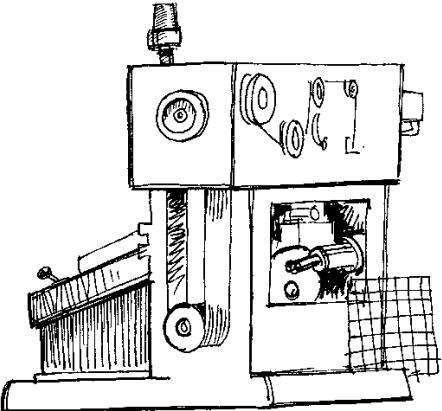
S5



# 5S

## Standardize Strategies

Use machine cleaning/lubrication check sheets

Machine	Items to clean
	1.
	2.
	3.
	Items to lubricate
	1.
	2.
	4.

S1

S2

S3

S4

S5



# 5S

## Standardize Strategies

Review the status of the work area regularly using 5S  
**audit checklists**



S1

S2

S3

S4

S5



# 5S

## 5S Audit Checklist

Helps ensuring that 5S standards are being met

Enables to better address compliance gaps

Provides an opportunity for continuous improvement

5S Audit Checklist	
SEIRI	✓
SEITON	
SEISO	✓
SEIKETSU	
	%

S1

S2

S3

S4

S5



# 5S

## 5S Audit Checklist Example

No unnecessary parts, stock and stored items left in the workplace	
All machines and pieces of equipment are in regular use	
All jigs, tools, fixtures and fittings are in regular use	
Storage area is defined to store broken, unusable or occasionally used items	
There are clear standards for eliminating unnecessary items	
All unnecessary items can be distinguished at a glance	
Storage of tools & equipment is well organized for ease of take and return	
Stored items are well organized	
Labels exist to indicate locations, containers, boxes, shelves & stored items	
There are clear indications of maximum & minimum stock quantities	
Dividing lines are all clean & all painted as per standard	
Safety equipment easily accessible	
Floors, walls, ceilings & pipework are in good condition & free from dirt	

S1

S2

S3

S4

S5



# 5S

## 5S Audit Checklist Example

#	Checklist item	Criteria	Exists
<b>Sort - SEIRI</b>			
1	Parts and stock items	No unnecessary items are left or stored in the workplace	
2	Machines and equipment	All machines and pieces of equipment are in regular use	
3	Jigs, tools and fixtures	All jigs, tools, fixtures and fittings are in regular use	
4	Other storage area	Storage area is defined to store broken, unusable or occasionally used items	
5	Standards for disposal	Standards for eliminating unnecessary items exist and are being followed	
<b>Set in order - SEITON</b>			
6	Tools and equipment	Storage of tools and equipment is well organized for ease of take and return	
7	Stored items	Stored items and parts are well organized	
8	Labeling	Labels exist to indicate locations, containers, boxes, shelves and stored items	
9	Quantity indicators	There are clear indications of maximum and minimum stock quantities	
10	Outlining / dividing lines	Dividing lines are all clean as per standard	
11	Safety	Safety equipment easily accessible and in good condition	
<b>Shining - SEISO</b>			
12	Building structure	Floors, walls, ceilings & pipework are in good condition and free from dirt/dust	
13	Racks and cabinets	Racks and cabinets are kept clean	
14	Machines, equipment & tools	Machines, equipment and tools are kept clean	
15	Stored items	Stored items are kept clean	
16	Lighting	Lighting is enough and all lighting is free from dust	
17	Ventilation	Good movement of air exist through the room (to limit the spread of viruses)	
18	Pest control	Pest control exists and effective	
19	Cleaning tools	Cleaning tools and materials are easily accessible	
20	Cleaning responsibilities	Cleaning assignments are defined and are being followed	
<b>Standardize - SEIKETSU</b>			
21	Visual controls	Visual controls such as color-coding, flow charts, and labeling are established	
22	Procedures	Procedures for maintaining the first three S's are being displayed	
23	5S documentation	5S checklists, schedules and routines are defined and being used	
24	Responsibilities	Everyone knows his responsibilities, when and how	
25	Regular Audits	Regular audits are taking place using checklists and measures	
<b>Sustain - SHITSUKE</b>			
26	5S System	5S seems to be the way of life rather than just a routine	
27	Success stories	Success stories are being displayed	
28	Rewards and recognition	Rewards and recognition is part of the 5S system	
Other Comments			

Manufacturing

#	Checklist item	Criteria	Exist?	Rating
<b>Sort - SEIRI</b>				
1	Cabinets and shelves	No irrelevant reference materials, documents, drawings, etc.		
2	Desks and tables	No irrelevant reference materials, documents, etc.		
3	Drawers	No excess pieces of equipment, documents, etc.		
4	Other storage area	Storage area is defined to store unneeded items and out-dated documents		
5	Standards for disposal	Standards for eliminating excess exist and are being followed		
<b>Set in order - SEITON</b>				
6	Desks, shelves & cabinets	Free of accumulations of papers and other objects		
7	Tools and equipment	All tools and equipment are stored in a fixed place		
8	Easy of take and return	Tools and equipment are well organized for ease of take and return		
9	Storage labels	Labeling of cabinets, shelves and files allows immediate identification		
10	Documents	Documents are filed in accordance with the Record Retention Guidelines		
11	Display areas	Displays are tidy, free of clutter, labeled and up-to-date		
12	Safety	Safety equipment easily accessible and in good condition		
<b>Shining - SEISO</b>				
13	Floor	The floor is kept clean and no signs of damage		
14	Building structure	Walls and ceilings are in good condition and free from dirt/dust		
15	Racks and cabinets	Racks and cabinets are kept clean and in good condition		
16	Equipment and tools	Equipment and tools are kept clean and in good condition		
17	Furniture	Desks, tables and other furniture are kept clean		
18	Lighting	Lighting is enough and the angle and intensity of illumination are appropriate		
19	Ventilation	Good movement of air exist through the room		
20	Trash containers	Trash containers are emptied on a regular basis		
<b>Standardize - SEIKETSU</b>				
21	Display boards	Visual controls and display boards are up-to-date		
22	Procedures	Procedures for maintaining the first three S's are being displayed		
23	5S documentation	5S checklists, schedules and routines are defined and being used		
24	Responsibilities	Everyone knows his responsibilities, when and how		
25	Regular Audits	Regular audits are taking place using checklists and measures		
<b>Sustain - SHITSUKE</b>				
26	5S System	5S seems to be the way of life rather than just a routine		
27	Success stories	Success stories are being displayed		
28	Rewards and recognition	Rewards and recognition is part of the 5S system		
Other Comments				

Offices

S1

S2

S3

S4

S5



# 5S

## Standardize Summary

“Ensure everything is done by everyone in a similar manner”

“Where there are no standards there can be no improvement.”

“Each time a standard is improved, it becomes the basis for future improvements.”

S1

S2

S3

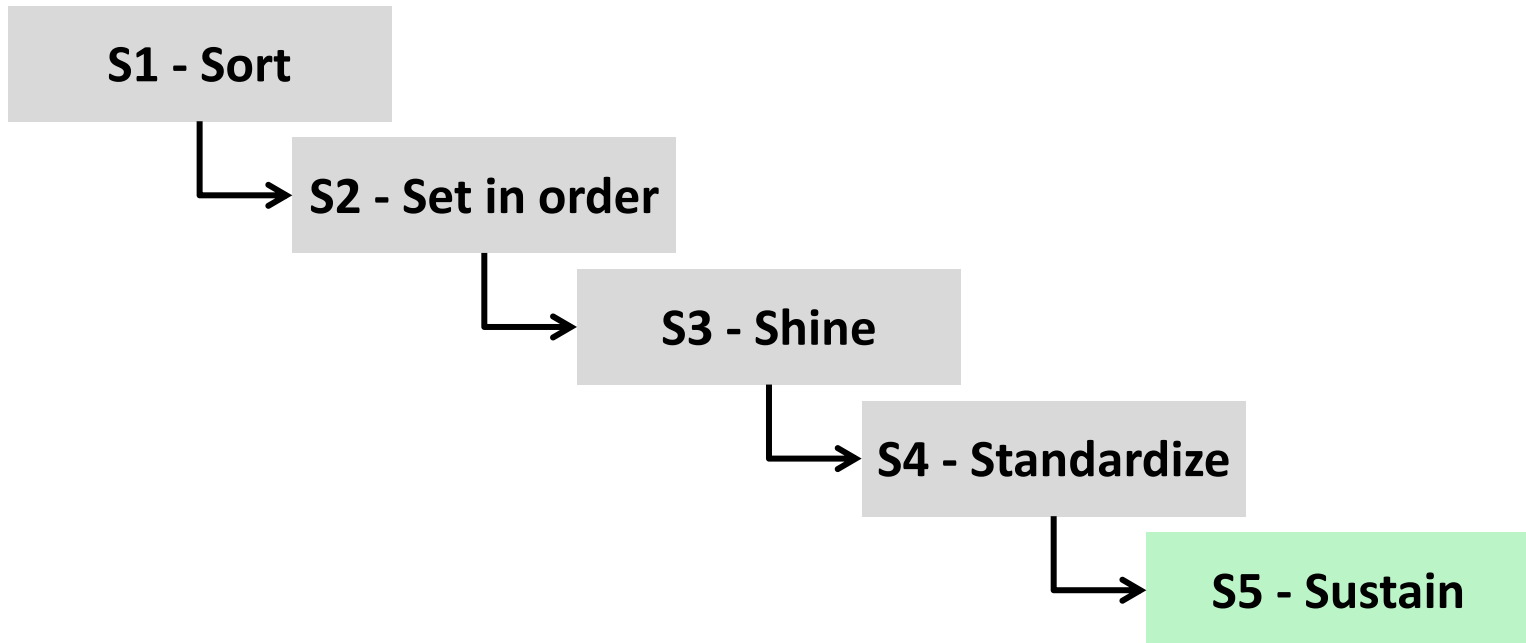
S4

S5



# 5S

Sustain / *SHITSUKE*



# 5S

## Sustain / *SHITSUKE*

Once the first four phases have been implemented, you must now focus on sustaining what has been accomplished

Sustaining is the disciplined application the first four 'S' practices in order for the 5S program to be successful



S1

S2

S3

S4

S5



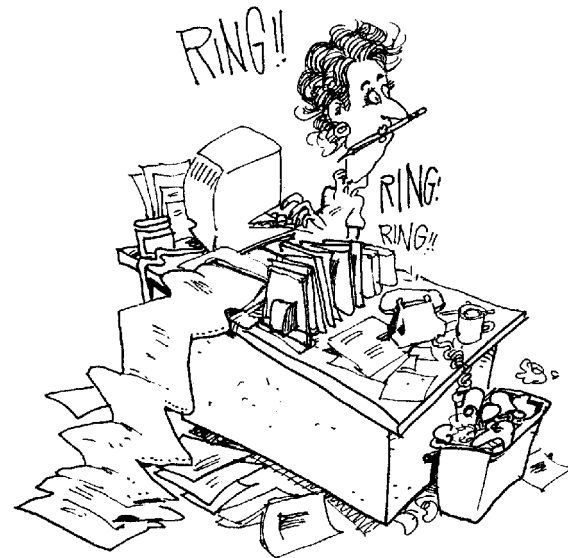
# 5S

## Sustain / *SHITSUKE*

It is by far the most **difficult** part to implement

Very often we **overlook** the need to sustain improvements

Many companies have found themselves with a cluttered dirty areas after their attempt to implement 5S



S1

S2

S3

S4

S5

# 5S

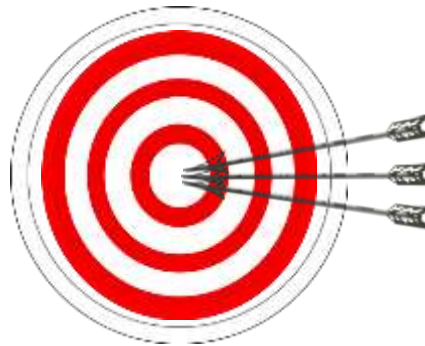
## Sustain / *SHITSUKE*

5S has a tendency to fail when:

There is a lack of organizational **readiness**

There is lack of **ownership** from the top

Leadership does not place continuous **focus** on it



S1

S2

S3

S4

S5



# 5S

Sustain / *SHITSUKE*

Leadership must buy in and establish a culture where 5S excellence is expected and nothing less is tolerated



S1

S2

S3

S4

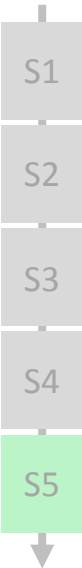
S5



# 5S

Sustain / *SHITSUKE*

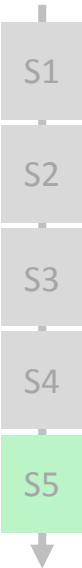
The focus should be on the following . . .



# 5S

## Sustain / *SHITSUKE*

Proper planning, training, monitoring and a formal system of accountability must exist in order for the program to ensure its successful continuation





# 5S

## Sustain Strategies

Ensure everyone in the company **knows the benefit** of implementing the 5S program

Use 5S **posters** and signs to remind of the benefits



S1

S2

S3

S4

S5

# 5S

## Sustain Strategies

Promote the 'showroom mentality'



S1

S2

S3

S4

S5



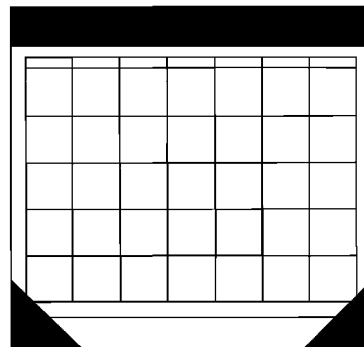
# 5S

## Sustain Strategies

Ensure everyone is **involved** and held accountable

Make it part of **health and safety**

Make it part of daily **Gemba** meeting



S1

S2

S3

S4

S5

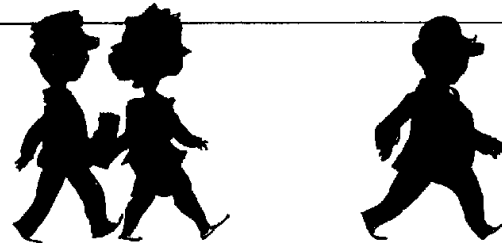


# 5S

## Sustain Strategies

Create **discipline** to perform the first four 'S' practices

**Train** everybody and expect them to do great things



S1

S2

S3

S4

S5



# 5S

## Sustain Strategies

**Monitor** results through appropriate metrics and analysis

**Audit** to ensure all defined standards are being followed up

Communicate audit results

**Reward** and recognize the efforts and accomplishments



S1

S2

S3

S4

S5



# 5S

## Sustain Summary

“Practice and repeat until it becomes a culture”

“Make it a way of life”

“Lead by example”

S1

S2

S3

S4

S5



Jan

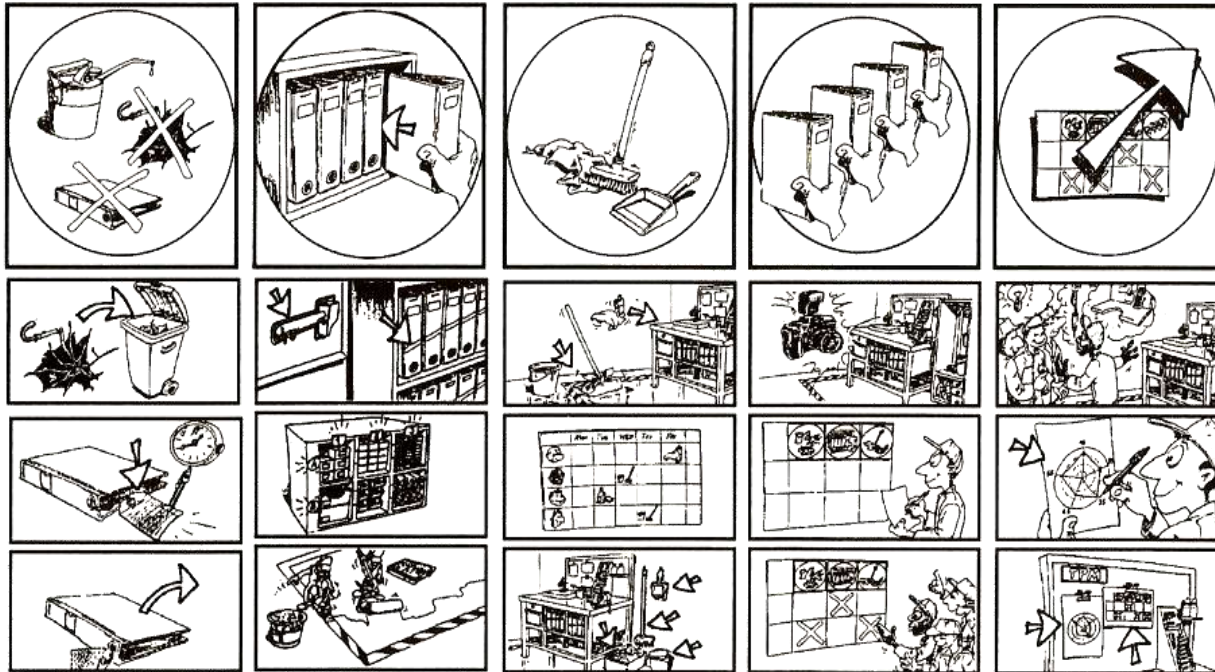
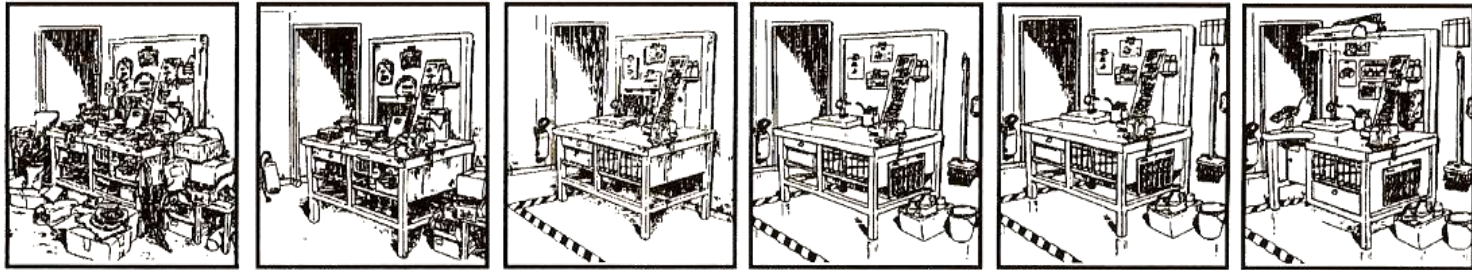
Feb

Mar

Apr

May

# 5S



# 5S

## How to Implement 5S

The best approach is to start with a pilot work area and use it as a model for the rest of the company



Start with whatever is the **simplest**

*Or* Find a **problem** for which 5S plays a key role in its solution



# 5S

## How to Implement 5S

Keeping it small and **simple** is better than starting big and having too many issues to deal with at the same time



# 5S

## How to Implement 5S

Remember that **top management** should understand the benefits and fully support the program



# 5S

## How to Implement 5S

After selecting the pilot area, establish a 5S **team** and appoint a **team leader**



Ensure the team understand the goals of implementing the 5S program

# 5S

## How to Implement 5S

Provide initial 5S **training** to the team. This will . . .

Help ensure employees fully understand 5S

Help employees understand how to implement 5S

Have the 5S program widely accepted

# 5S

## How to Implement 5S

Observe the area and **evaluate the current situation**

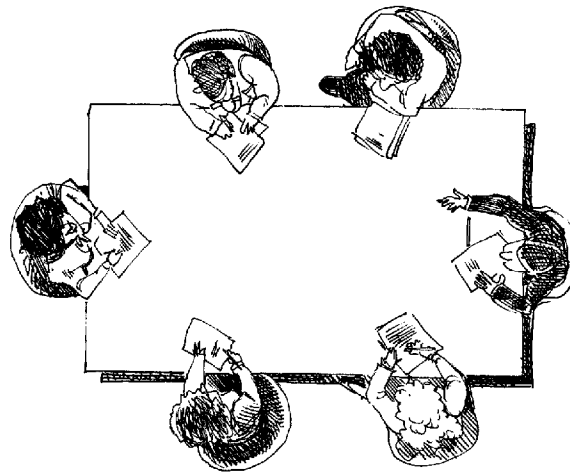
Collect data and take  
the **'BEFORE'** photos



# 5S


## How to Implement 5S

**Brainstorm** with the team to identify opportunities for improvement



# 5S

## How to Implement 5S

Photo	Improvement Ideas
	1.
	2.
	3.
	4.
	5.
	6.
	7.
	8.
	9.
	10.

# 5S

## How to Implement 5S

Establish an **improvement plan** that details the activities, responsibilities and timeframes

What	Who	When	Resources	\$
1				
2				
3				
4				

Include in the plan the required **resources** and any **financial** requirements



# 5S

## How to Implement 5S

**Implement** the plan to improve the area



S1



S2



S3



S4

Spend proper time on each 'S'

# 5S

## How to Implement 5S

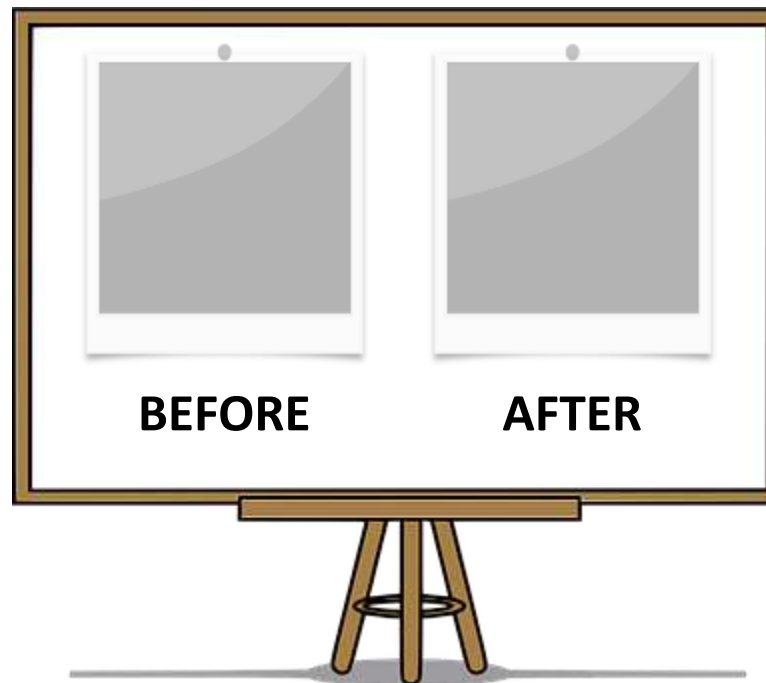
**Audit** the area and take the 'AFTER' photos to showcase the improvements



# 5S

## How to Implement 5S

'BEFORE' and 'AFTER' photos allows everybody to see at a glance if the present situation meets the standard



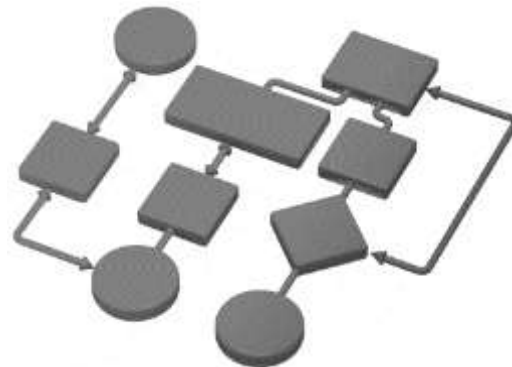
# 5S

## How to Implement 5S

Publish the outcomes on the 5S notice boards

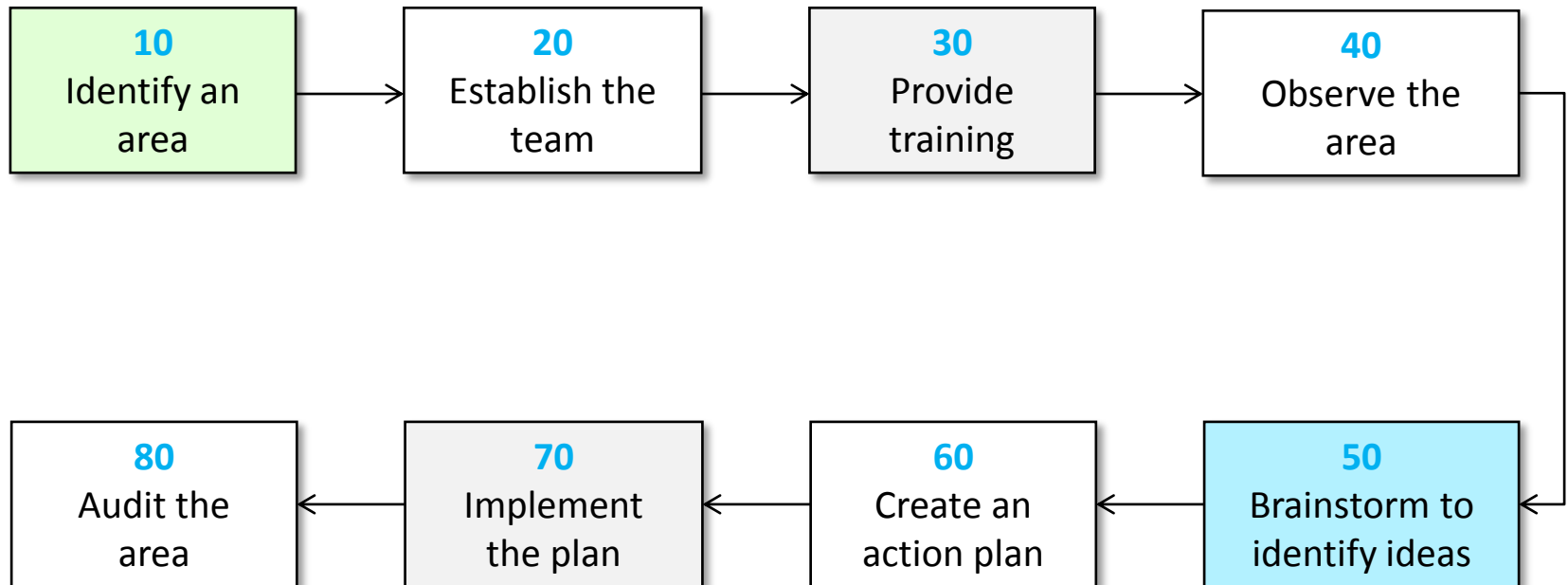
Reward and recognize the efforts

Develop and implement a control plan to sustain the improvement *in that pilot area*



# 5S

## How to Implement 5S – Summary

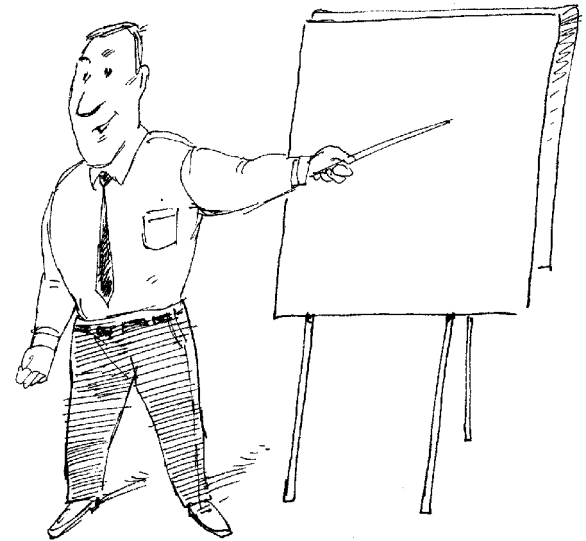


# 5S

## How to Implement 5S – Initial Report

Don't forget to **report** the outcomes to the leadership team

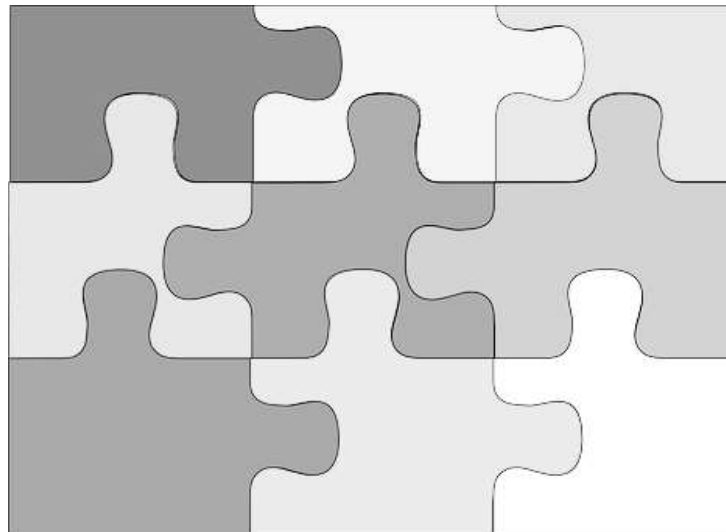
This is going to be a **justification** why you should carry on with the program



# 5S

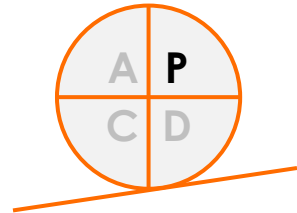
## A Full Scale 5S Program

Once you have created a good example and demonstrated a success, you can now start implementing the 5S program in full scale

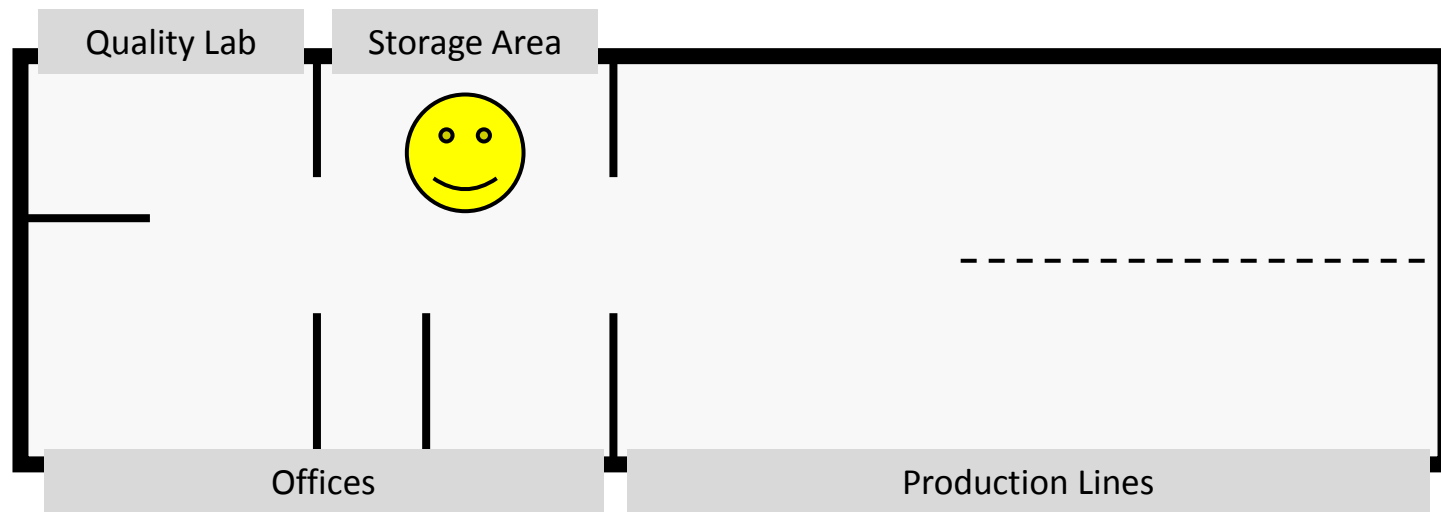


# 5S

## Selecting the Areas



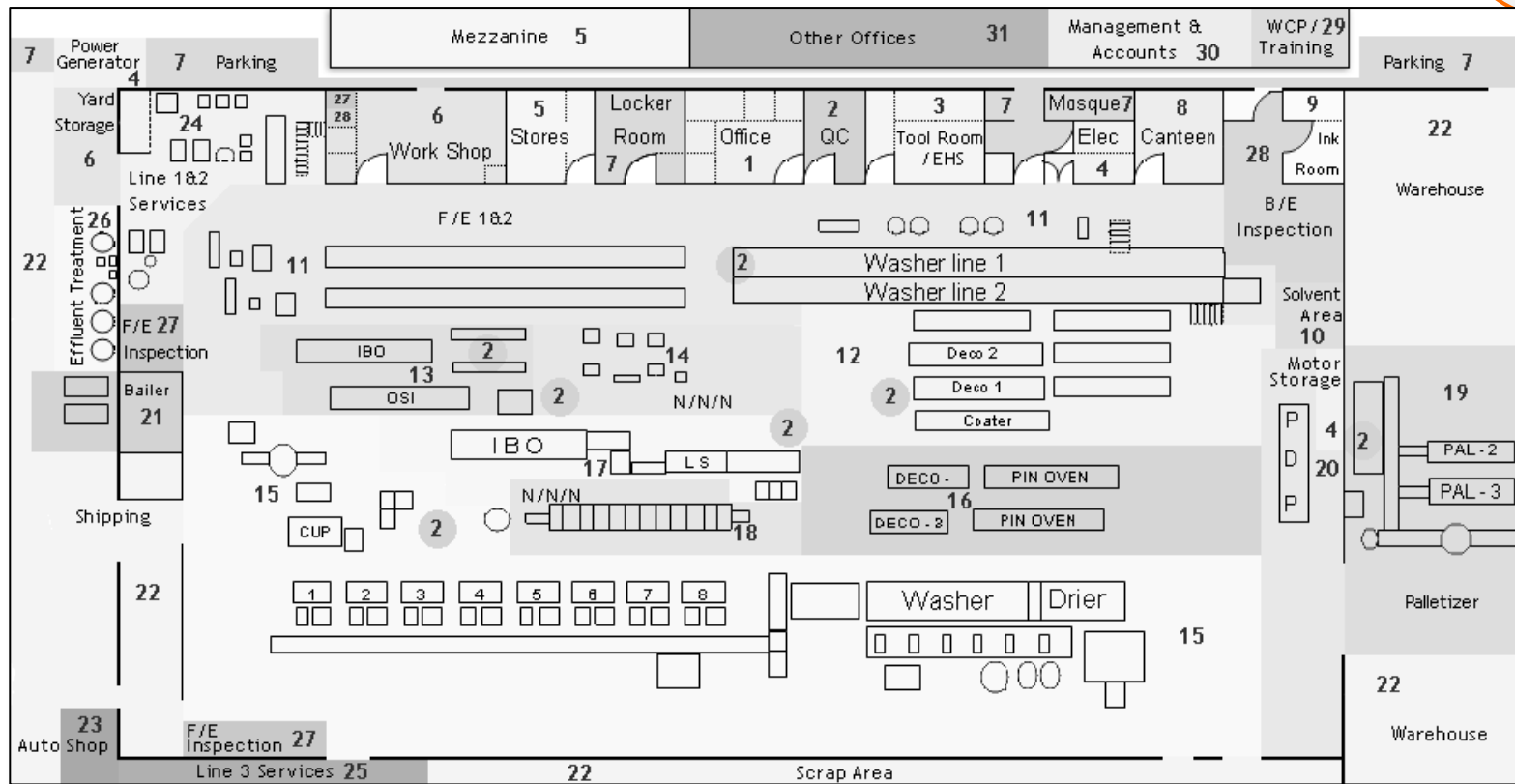
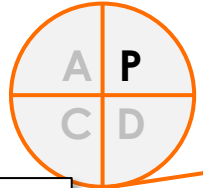
Start by selecting the areas where you need to implement improvements using 5S





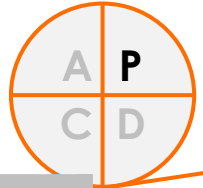
# 5S

## Selecting the Areas - Example



# 5S

## Selecting the Areas

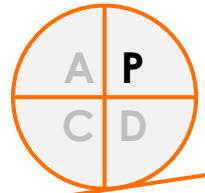


Area #	Area Name	5S needed?	5S Leader
6	Workshop	Yes	Zekaria
3	Tooling room	Yes	Sami
5	Spare parts store	Yes	Emir
2	Quality labs	Yes	Peter
8	Cafeteria	No	Hans
22	Warehouse	Yes	Adam
5	Mezzanine	Yes	Pablo
23	Auto shop	Yes	Kerem
33	Shipping office	Yes	Jamal

An example of 5S areas and the responsible people

# 5S

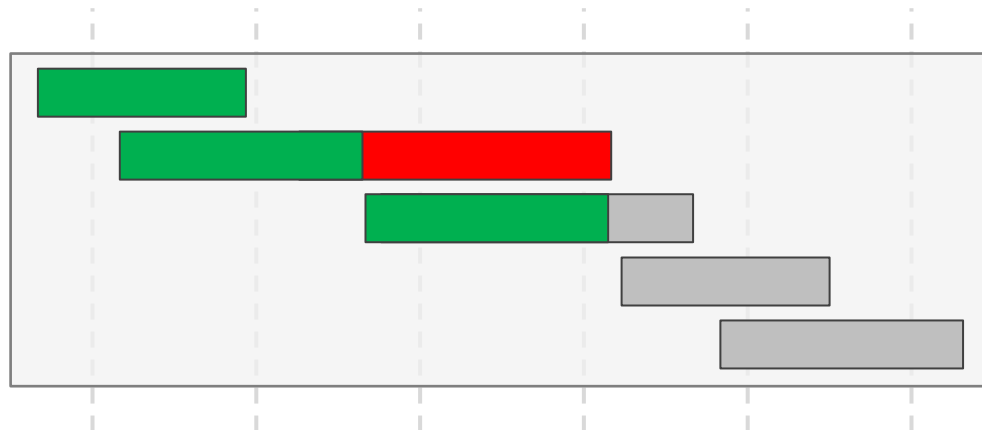
## A Full Scale 5S Program



Create an **integrated plan** to progress area by area

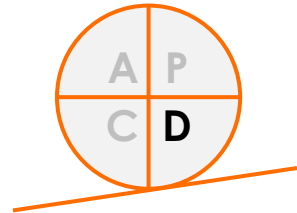
Begins at the **company level** (include controls for sustain)

Then have an improvement plan **per area**



# 5S

## A Full Scale 5S Program



Here we will use a combination of . . .



PDCA



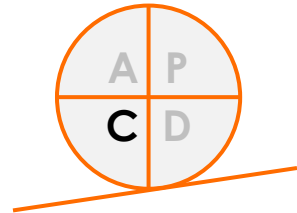
Kaizen Events



Quick wins /  
Just-do

# 5S

## Evaluating



The progress and effectiveness of the program should be **evaluated regularly**

This can be achieved using the **5S checklist**

SEIRI		✓
SEITON		
SEISO		✓
SEIKETSU		
		%

Managers and supervisors should also participate in these reviews

# 5S

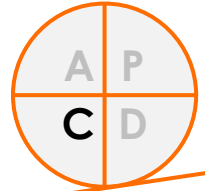
## An example of 5S audit report



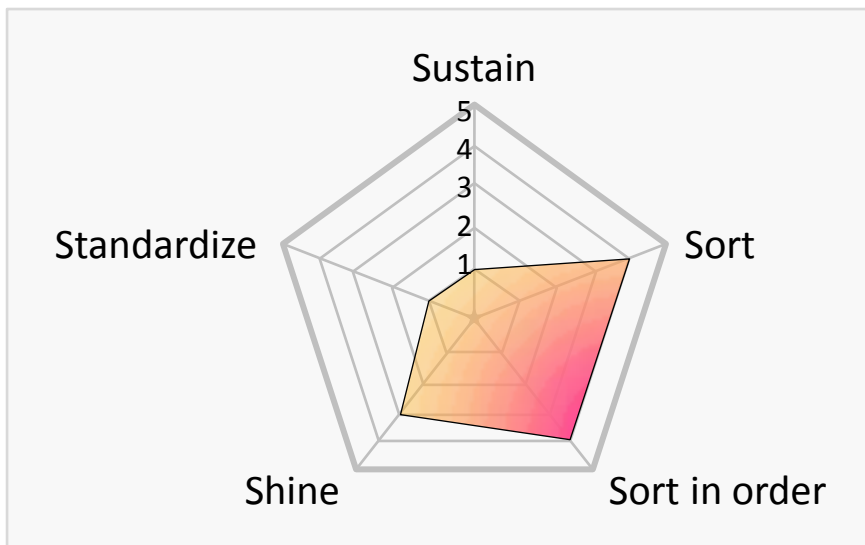
Work Area: Workshop									
Checklist item	week 1	week 2	week 3	week 4	week 5	week 6	week 7	week 8	week 9
No unneeded items		X	X						
Waste management									
Items in place			X		X				
Files in place	X								
Cleanness			X	X					
Lighting						X			
Ventilation		X							
Cleaning tools	X		X	X					
Pest control									
SOPs followed	X			X					
Display boards	X	X			X				
	64%	73%	64%	73%	82%	91%			

# 5S

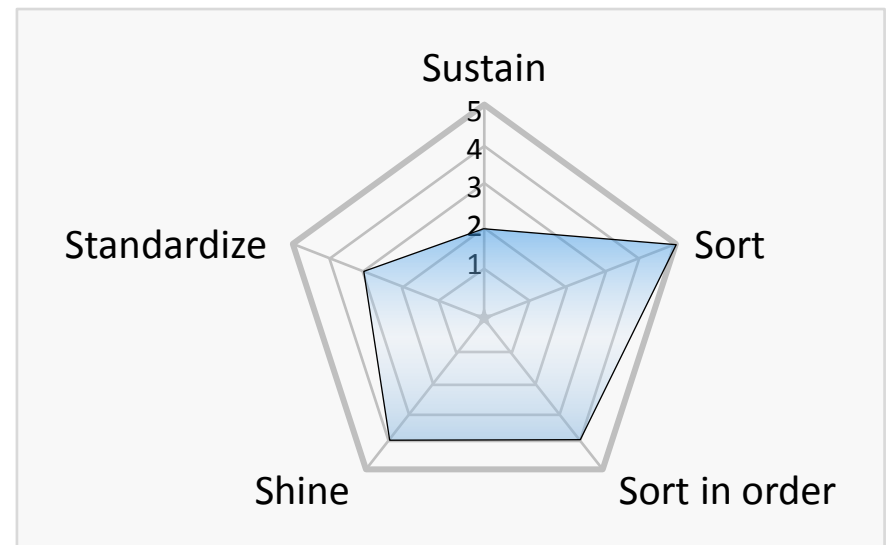
An example of 5S audit report



A radar chart can be used to track the 5S progress (*and compare*)



**Workshop**



**Tooling room**

An overall score for each section can be calculated





# 5S

## The Company Level Plan



Should contain controls to sustain improvement overtime

# 5S



## Organize Your Area

In your team:

1. Identify an area to implement 5S.
2. Evaluate the selected area and take photos.
3. Return back, then brainstorm to identify opportunities for improvement.
4. Create an action plan to improve the area.

