

# **QUALITY TOOLS**

## **A Toolbox for Parents**



**Developed by the Baldrige Quality Academy  
Montgomery County Public Schools  
Sherwood Elementary School  
2009**

This Toolkit has been prepared to help parents use and understand some of the many quality tools that students and teachers are using during the school day. These tools are useful in approaching “life’s problems” and parents are encouraged to try them out with family and friends. By using these processes parents can focus and reflect on solving the problem while removing personalities from the discussion.

If you need additional information, you can contact the MCPS Baldrige Quality Academy. Information is also available on the MCPS website and on the internet. We hope that you will find these tools useful instruments.

## **Contents**

Mission Statement .....	3
My Job, Your Job, Our Job .....	4
Ground Rules.....	5
Flow Chart.....	6
Affinity Diagram.....	8
Lotus Diagram.....	10
Force Field Analysis.....	12
Bone.....	14
PDSA.....	16
Plus/Delta/Questions.....	18

**Mission Statement:** a statement of purpose. It provides direction and helps focus on why and how group members should work with each other. It enables them to standardize or improve their work and promote cooperation.

Suggested Uses:

- Establishing common understandings and goals.
- Refocusing on relationships. Sometimes the group seems to lose its way and the mission brings the group back together.

## **What is our mission?**

Answering the following questions will help when writing a mission statement:

**Who are we?**

**Why are we here?**

**What do we have to do well together?**

**How will we make it happen?**

### **The Johnson Family Mission Statement**

**We are the Johnson family. We are here to love and take care of each other. We will be here for each other. We will support one another when one of us is ill or upset, help each other solve problems, and celebrate successes and special occasions together. We will make this happen by regularly eating together, discussing our ideas and concerns, and holding family meetings when needed to address problems or make decisions.**

**My Job, Your Job, Our Job:** a chart of responsibilities. It is used to help the group define roles and responsibilities. It helps all group members visualize responsibility expectations and also demonstrates that all group members are expected to make contributions to the work that must be done. Note – as children get older, they are able to assume increased responsibility; therefore, it is important to revisit this chart from time to time.

Parents' Jobs	Children's Jobs	Together Jobs
<ul style="list-style-type: none"> <li>• Earn money</li> <li>• Provide a place to live</li> <li>• Make home repairs</li> <li>• Buy food, clothes</li> <li>• Take care of children</li> <li>• Prepare meals</li> <li>• Ask children about school</li> <li>• Supervise homework</li> <li>• Keep family safe</li> <li>• Send children to bed on time</li> <li>• Pay bills</li> <li>• Be sure children complete their jobs</li> <li>• Clean bedroom weekly</li> <li>• Clean downstairs bathroom weekly</li> <li>• Walk and feed dog Friday, Saturday</li> <li>• Organize family outings</li> <li>• Drive children to their activities</li> <li>• Develop chore assignment calendar</li> </ul>	<p><u>Marie</u></p> <ul style="list-style-type: none"> <li>• Complete homework daily</li> <li>• Clean room weekly</li> <li>• Clean upstairs bathroom weekly</li> <li>• Take out trash</li> <li>• Walk and feed dog Monday, Tuesday, Thursday</li> <li>• Take turns emptying or loading dishwasher and setting table</li> <li>• Attend gymnastics lessons</li> <li>• Hang up coat</li> </ul> <p><u>George</u></p> <ul style="list-style-type: none"> <li>• Complete homework daily</li> <li>• Clean room weekly</li> <li>• Vacuum upstairs hall and stairway weekly</li> <li>• Take out recycling</li> <li>• Walk and feed dog Sunday, Wednesday</li> <li>• Take turns emptying or loading dishwasher and setting table</li> <li>• Attend soccer practice</li> <li>• Hang up coat</li> </ul> <p><u>Ana</u></p> <ul style="list-style-type: none"> <li>• Pick up and put away toys</li> <li>• Put coat on hook</li> </ul>	<ul style="list-style-type: none"> <li>• Clean unassigned rooms of house</li> <li>• Answer the phone</li> <li>• Watching Ana</li> <li>• Shovel snow</li> <li>• Pack lunches</li> <li>• Listen to each other</li> </ul>

**Ground Rules:** The Ground Rules establish guidelines for how group members act and work together. They provide a reflection point when actions or behaviors are unacceptable.

Suggested Uses:

- Home behavior
- Eating out
- Having a friend over
- Going to a sleepover
- Having a babysitter
- Dating
- Riding in the car
- Shopping

## Ground Rules for the Movies



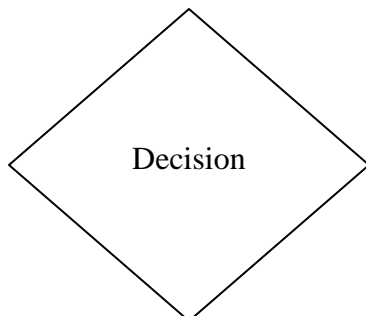
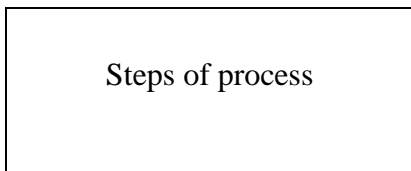
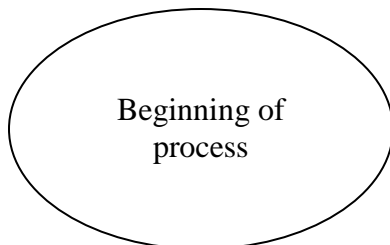
- Don't get out of your seat. Well, unless you have to go to the bathroom and then you get your mom or dad first and you have to whisper.
- Don't talk, but you can whisper and laugh--only if everybody else is.
  - Don't take other people's candy.
  - Don't touch other people.
- If you need your mom or dad you have to wave or whisper, you can't say, "Mommy," or "Daddy," in a loud voice.

**Flow Chart:** A diagram that shows a step by step progression that can be used to plan stages of a project or describe a current process using special symbols and connecting lines. It can be used to standardize or improve work processes.

Suggested Uses:

- Defining a process or routine
  - “What is our morning routine for getting ready for school?”
  - “What steps do we take to solve a personal problem?”
  - “How do we set the table for dinner?”
  - “How do we prepare to go to our soccer/baseball/basketball game?”
- Establishing routine for evening activities
- Cleaning up kitchen after dinner
- Cleaning up your room
- Yard work
- Defining sequential steps of a chore
- Time for Bed

Shapes commonly used in flowcharts include ovals, rectangles, and diamonds. Ovals are used to show the beginning of the process, rectangles signify steps to be followed, and diamonds indicate questions that must be answered/decisions that must be made before determining the next step. The shapes are connected with arrows to demonstrate the path that is to be followed.



**Cleaning Up  
Your Room**

Take everything  
out from under  
your bed.

Make your bed.

Put the dirty clothes in the  
laundry  
basket.

Put the clean clothes in the  
closet or dresser where they  
belong.

Close the books, and stand  
them on the  
book shelf.

Put away the toys.

Put the trash in the trash can.

Is  
**everything**  
put away?

No

Yes

Dust the furniture.

Vacuum the floor.

**What a clean room!**



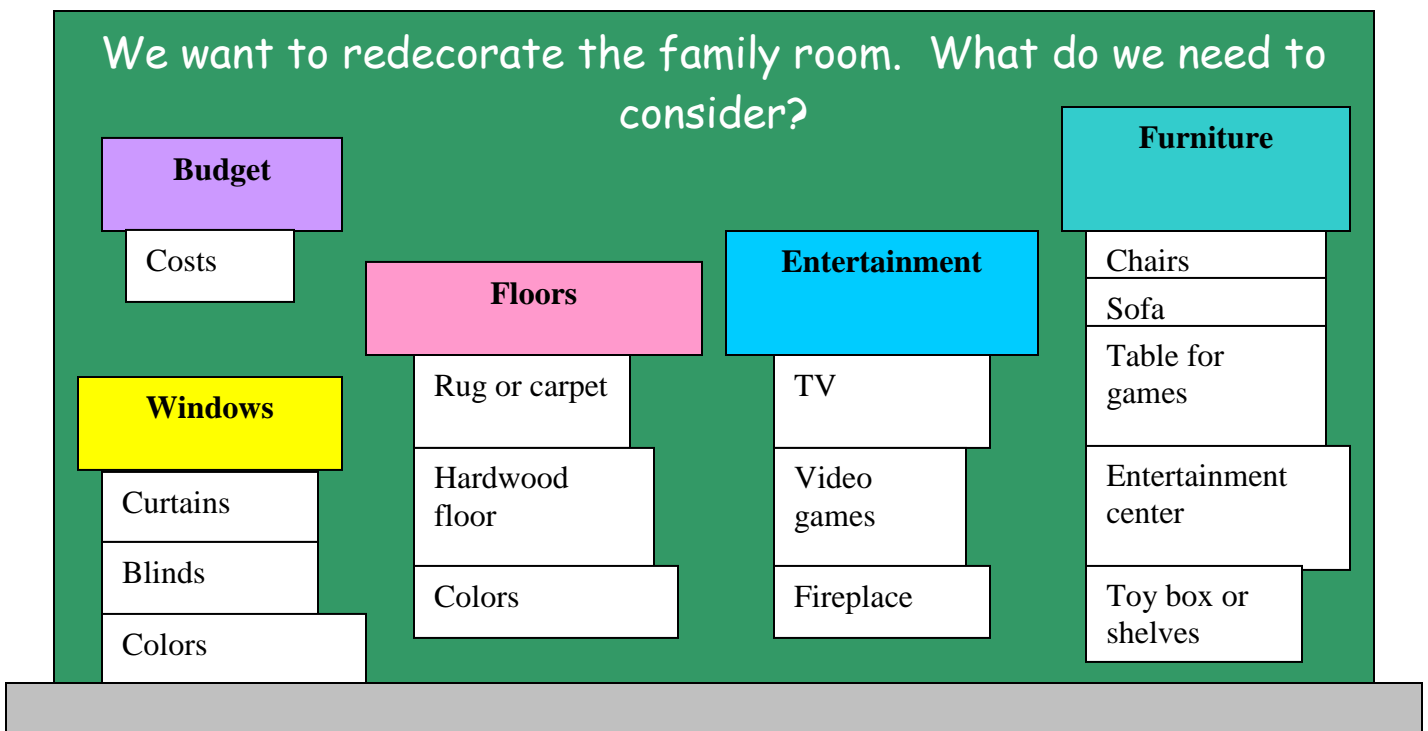
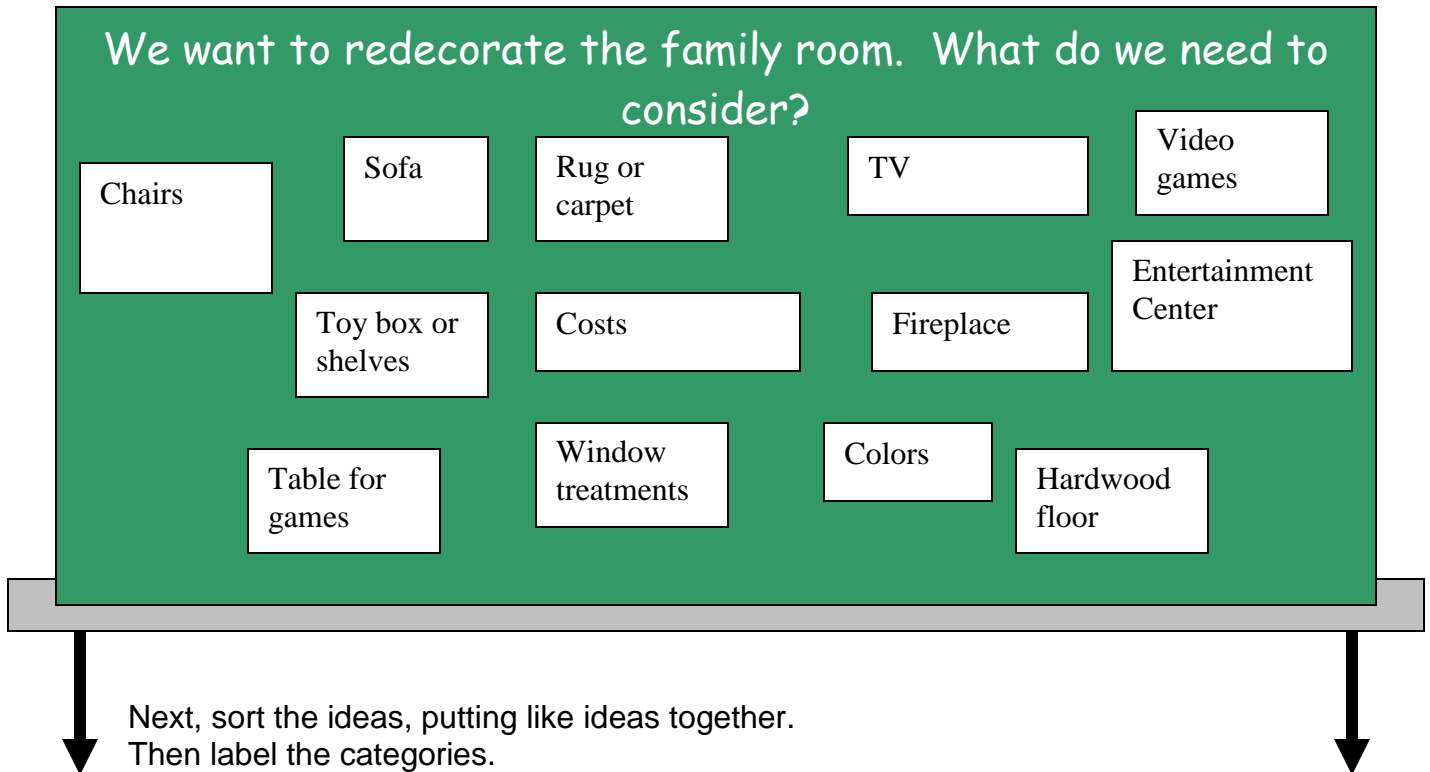
***Affinity Diagram:*** A quality tool that allows a group to brainstorm a large number of ideas/issues and then organize and summarize the ideas/issues into natural groupings. An easy way to do this is to have sticky notes, have each person write their ideas on them, and paste them on a wall or board. Then ask the group to sort the sticky notes into categories.

Suggested Uses:

- What chores do we need to do to keep our household organized and neat?
- Where do we want to go on vacation? What do we want to do while we are on vacation?
- Things we want to do
- Places we want to go
- Writing/research project
- Causes of unacceptable behavior

# Affinity Diagram

First, collect the ideas:



**Lotus Diagram:** This is another format that allows a group to brainstorm a large number of ideas/issues while organizing them by category. The group identifies the main idea and puts it in the middle box of the center section. Then the group identifies up to 8 sub categories that are a part of the main idea. These sub categories are repeated in the middle box of the 8 outside sections. The group can then identify up to 8 related details for each of the sub categories. This helps to break a big problem down into manageable smaller pieces. The Lotus diagram is also helpful for expanding ideas.

Suggested Uses:

- Family responsibilities
- Planning a party
- Planning a vacation
- Organizing frequently called phone numbers/email addresses
- Rainy day activities
- Redecorating the family room

1 Detail	2 Detail	3 Detail						
4 Detail	1. Subtopic	5 Detail		2. Subtopic			3. Subtopic	
6 Detail	7 Detail	8 Detail						
			1. Subtopic	2. Subtopic	3. Subtopic			
	4. Subtopic		4. Subtopic	<b>MAIN TOPIC</b>	5. Subtopic		5. Subtopic	
			6. Subtopic	7. Subtopic	8. Subtopic			
	6. Subtopic			7. Subtopic			8. Subtopic	

Cell Phone	Work		Doctor	Dentist	Poison Control		Cell Phone	Work
	Mom			<b>Emergency 911</b>			Dad	
Grandma Debbie	Papa Jim	Uncle Joe	Mom	Emergency	Dad	Papa	Granny	Aunt FiFi
Aunt Cindy & Uncle Mike	Mom's Relatives		Mom's Relatives	Phone Numbers	Dad's Relatives	Uncle David	Dad's Relatives	Uncle Lynn & Aunt Linda
			Neighbors	Close Friends	Babysitters	Aunt Martha & Uncle Milton	Uncle Larry & Aunt Teresa	Uncle Ian & Aunt Anita
Mike & Lilly	Mark & Kim	Gary & Judy	Ian & Melissa	Angie	Mary K & Allen	Karen	Jennifer	Dawn
George & Janet	Neighbors	Roy & Nancy	Geneva	Close Friends	Wendell & Joyce	Angela	Babysitters	
Sarah		Luke	Darwin	Beulah	William & Marvella			



***Force Field Analysis - Drivers and Restrainers:*** The force field analysis, sometimes called a drivers and restrainers diagram, is a technique used to identify the root cause(s) of a problem. First the goal is identified. Next the drivers (those things which support attainment of the goal) and the restrainers or “flat tires” (those things which work against attainment of the goal) are listed. These drivers and restrainers are analyzed to see what needs to be strengthened and what needs to be eliminated in order for the goal to be reached. Identifying actions to be taken will help solve the problem.

Suggested Uses:

- What helped to make our trip to the museum a good family outing? What hindered us from enjoying the trip to the maximum?’
- What helped us to bake the cookies for the party? What kept us from producing the best cookies that we could make?’
- What helped our family decide on which new couch to purchase? What kept us from making the right choice?’
- Having some family fun
- Completing chores
- Completing homework
- Showing respect
- Following directions
- Taking care of my pet
- Expressing my feelings in a kind way
- Getting more exercise

## Force Field Analysis

Goal: I will remember to take my instrument to school.

 <p><b>Drivers</b> What are we currently doing that is helping us to reach our goal?</p> <ul style="list-style-type: none"> <li>• Band lesson scheduled every Friday</li> <li>• Can't go to lesson without instrument</li> <li>• Want so show Ms. Brooks how much I've improved</li> <li>• Won't have another lesson until next week</li> <li>• Don't want to disappoint my parent</li> </ul>	 <p><b>Preventers</b> What is keeping us from reaching our goal?</p> <ul style="list-style-type: none"> <li>• Forget it</li> <li>• In a hurry</li> <li>• Running late</li> <li>• Can't find it</li> <li>• Have too many other things to take</li> <li>• Left it out of the case after practicing last night</li> <li>•</li> </ul>
--	---

Who	What	When
Me	Put instrument in case	After practicing
Me	Put case with backpack by door	Every Thursday night
Me	Sticky note reminder on bathroom mirror	Every Thursday night

**Bone Diagram:** The bone diagram is a tool that enables the group to clarify the “current state” and the “desired state” of affairs and recognizing that change takes time. Driving and preventing forces are identified so that the group can understand the changes that must take place. The improvement steps are defined and recorded on the bone diagram so that everyone is aware of the transition process.

Suggested Uses:

- Increasing attendance at PTA meetings
- Changing the way we spend our money
- Correcting messy bedrooms
- Having some family fun
- Going on a vacation
- Spending time with our children
- Improving healthy habits



## DRIVING FORCES

- I want to do well.
- I believe in myself.
- My parents will support me.

Desired State  
Improved grades!

6. Be strict. Make sure I finish my work before moving onto something else.

5. Motivate myself. Tell myself that I can do it!

4. See my teacher for extra help.

3. Study the subjects I am not doing well in.

2. Space out my work and reward myself when I am done.

1. Devote 1 hour to studying.

Transition Steps

## Present State

I am not earning the grades I want to earn.



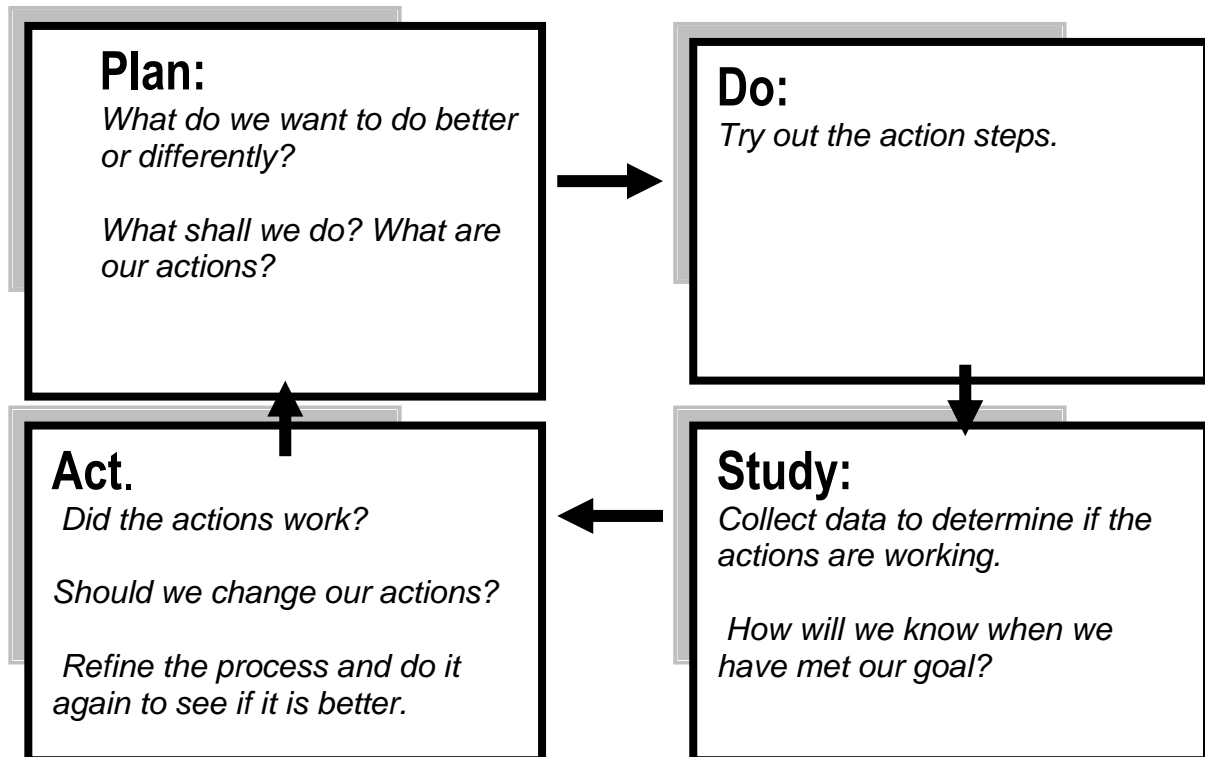
## RESTRAINING FORCES

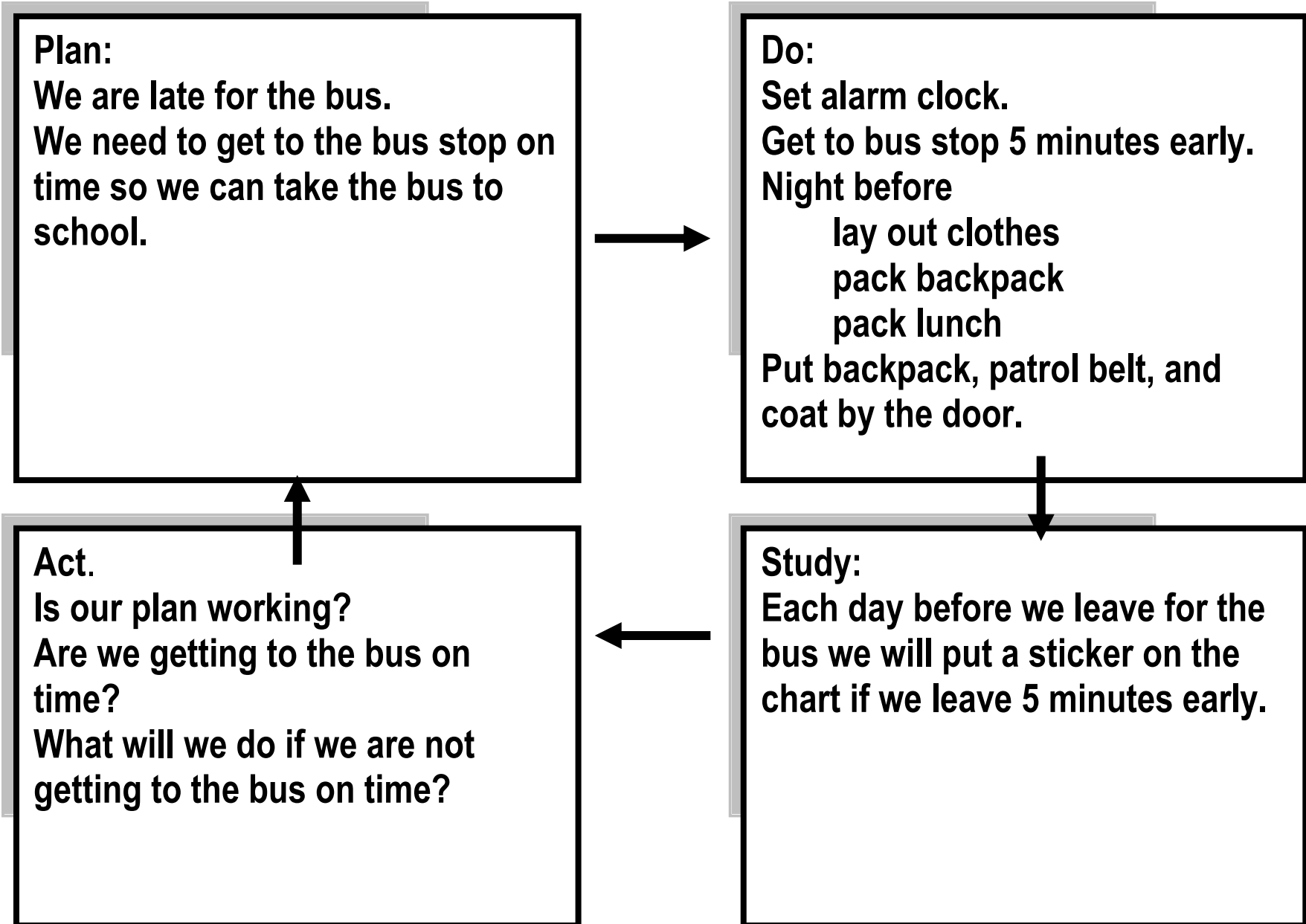
- I don't spend much time on my homework.
- I don't use my time wisely.
- I skip things I don't understand.

**PDSA:** Plan Do Study Act (PDSA) is a process improvement cycle. First we identify the opportunity for improvement, the problem that must be solved. Next, we identify the action we will take to make improvement. We'll also identify the data we'll collect and use to analyze whether or not our action is helping us improve. After studying the data, we'll decide on our next action steps.

Suggested Uses:

- Chores
- Cleaning the house
- Reducing TV/Video Game time
- Completing homework
- Sibling rivalry





**Plus/Opportunities for Improvement/Question (POQ)**: The purpose of this tool is to have everyone consider what is going well, what might be changed to improve the process, and what the group still does not understand. Whether it is used at the beginning, in the middle, or at the end of a project, the POQ is an effective evaluative device that opens communication and taps the energy of the entire group. The data from the POQ may be used to identify “next steps” or determine if the project is complete.

Suggested Uses:

- Family trip to the museum
- Evening with a babysitter
- Cookie baking
- Play date
- Playing a board game
- Table behavior during dinner

**Plus (What are we doing well?):**

**Opportunities for Improvement (OFI)/Suggestions (Things we could do differently or better):**

**Questions (Things we don't know or understand):**

# Birthday Party

<p style="text-align: center;"><b><u>Plus</u></b></p> <ul style="list-style-type: none"><li>▪ Good cake with extra frosting and M &amp; M decorations</li><li>▪ Scavenger hunt was lots of fun</li><li>▪ All of my friends were there</li><li>▪ Piñata was great – candy and toys for everyone</li></ul>	<p style="text-align: center;"><b><u>Opportunities for Improvement</u></b></p> <ul style="list-style-type: none"><li>▪ Hold the party at a special place</li><li>▪ Have a karaoke machine</li><li>▪ Make more snacks to have during the party</li></ul>
<p style="text-align: center;"><b>Questions</b></p> <ul style="list-style-type: none"><li>▪ When is grandpa's birthday?</li><li>▪ How much would it cost to rent a special room?</li><li>▪ Would all of our aunts, uncles, and cousins be able to come?</li><li>▪ Where could we rent or borrow a karaoke machine?</li></ul>	