

# Problem Solving Activity - The Lawn

## Instructor Guide

### Note to Instructor

This activity is intended to give participants practice in using a systematic approach to problem solving by solving a simple, but realistic problem. Participants should follow the six steps to problem solving as close as this problem allows.

### *Here's how the activity works and some pre-activity preparation:*

- Participants will role play as the owners of a lawn care company.
- A customer needs help solving a problem with her lawn.
- The customer has provided a list of symptoms and information. These items are listed one by one on the “The Lawn cards” found at the end of this Instructor Guide.
- *Prior to starting the activity*, print and cut out one set per team of the “The Lawn cards”. The cards will be distributed to the participants in Step 2b of the activity.

### *What the participants do...*

- Step 1: Write a Problem Statement.
- Step 2a: Develop a list of questions for the customer.
- Step 2b: Collect data (Instructor distributes one set of cards to each team)
- Step 3: Using the information on the cards, brainstorm for possible causes
- Step 4: Analyze the possible causes against the “data” (the cards)
- Step 5: Identify the root cause of the problem and develop an action plan.
- Step 6: Identify how the customer will be able to verify that the problem has been fixed.

This Instructor Guide will help you facilitate this activity so that the participants can successfully use a six-step approach to problem solving and experience the effectiveness of this process.

The *Systematic Problem Solving Learning Module* consists of the following:

- Activity: Thinking Creatively
- A Systematic Approach to Problem Solving PK (Reading material)
- Brainstorming Activity
- **Problem Solving Activity – The Lawn**
- Problem Solving Tools PK (Reading Material)
- Problem Solving Activity – A MEMS Process Problem

This companion Instructor Guide (IG) contains all of the information in the Participant Guide (PG) as well as answers to the activities.

*[Original source of activity: The Encyclopedia of Team-Building Activities, Edited by William Pfeiffer, Pfeiffer & Company, 1991]*

## Activity Description

In this activity you apply a systematic approach to problem solving to solve a problem with a customer's lawn. You and your team play the roll of co-owners of AAA Lawn Care, a service company that prides itself on keeping the communities' lawns healthy and green. A customer brings in a problem that requires you and your team to solve and correct; therefore, it is your responsibility and that of your team to correctly identify the cause of the problem and develop an action plan that prevents the problem from reoccurring.

You will be evaluated on how well you apply a systematic approach to problem-solving, how well you communicate with the customer (the instructor) and your team members, and how well you work together as a team.

### Time to Complete

Approximately 30 minutes

## Objectives

- Given a problem, work with at least two other people to solve the problem using a systematic approach to problem solving.
- Develop an action plan that fixes the problem.
- Apply effective communication skills through the entire problem solving process.

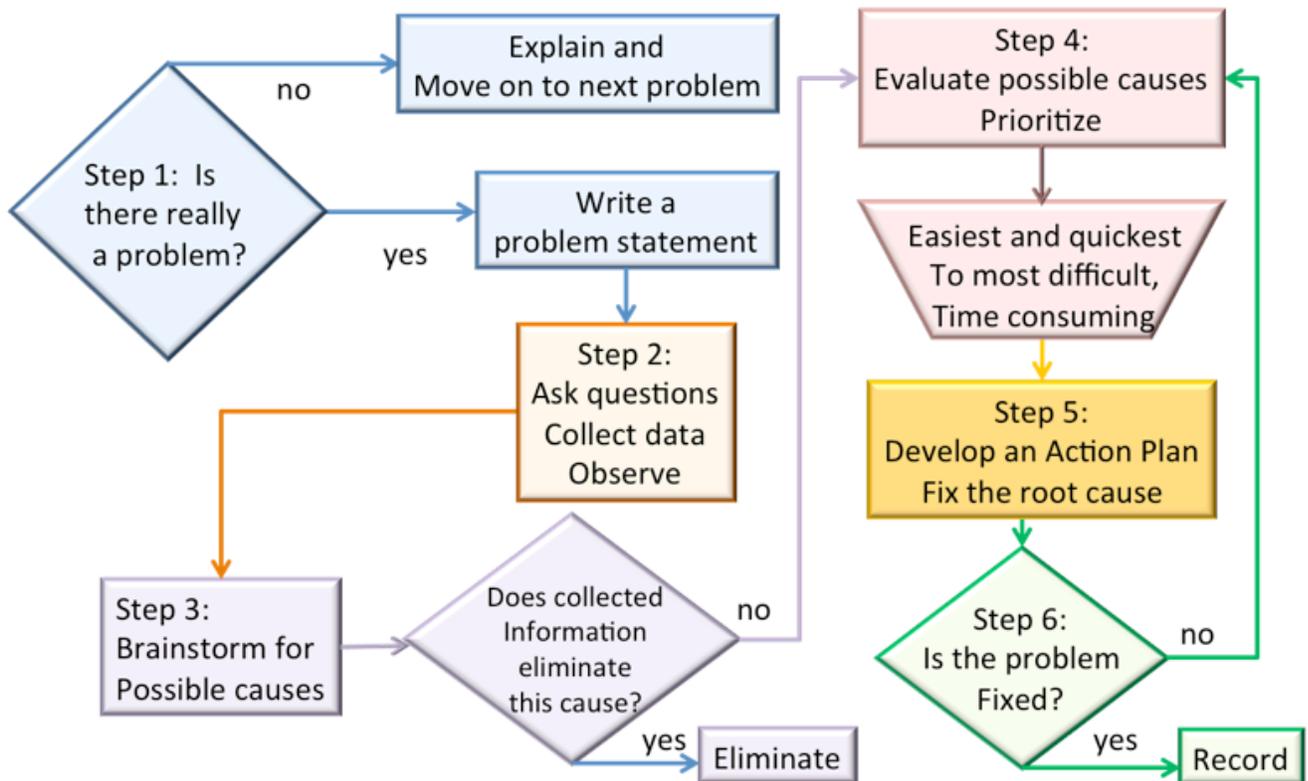
## Activity – The Lawn



1. Assign the following roles:
  - a. Recorder - Writes necessary information on the board, flip chart or computer screen for all to see and keeps a written accounting of the team's process. Recorder is also a participant in the problem solving process.

- b. Facilitator – Keeps the team members on track during the activity and the activity moving forward. Mediates the exchange of information and ensures that all team members participate and understands before moving forward. The facilitator is also a participant; however, the facilitator has to be able to ensure that ALL participants participate and should be careful not to dominate nor control the conversation. An effective facilitator usually waits to contribute until all other participants have contributed. Choose this person wisely.
  - c. Timekeeper – Keeps track of the amount of time it takes to finish the activity.
2. The team’s role – As owners of AAA Lawn Care you solve problems with people’s lawns.
  3. The Problem – A customer has come to you and has said that she has “dead spots in her lawn”.

As a team, you are to use the Six Steps of Problem Solving to solve this problem.



Step 1: Write the problem statement.

Step 2a: Make a list of questions that you would ask the customer.

**Note to Instructor:** After the list of questions has been made, randomly distribute the cards to the team members.

Step 2b: Ask your instructor for the “symptoms cards”. Use the information on the cards to identify “data” or symptoms of the problem.

Step 3: Brainstorm for possible causes to the problem.

Step 4: Analyze the possible causes and identify the root cause of the problem.

Step 5: Develop an action plan on how AAA Lawn Care will solve the customer’s problem.

Step 6: State how you and the customer will verify that the problem has been fixed.

**Note to Instructor:** The root cause of the problem is “grubs”. The grubs are eating the roots of the grass, killing it. Since moles eat grubs, they are attracted to this yard and not the neighbors’ yards. In tunneling for food, the moles are making the ridges. Therefore, if you get rid of the grubs, the moles would go elsewhere.

### Post-Activity Questions

Below are the objectives of this activity.

- Given a problem, work with at least two other people to solve the problem using a systematic approach to problem solving.
- Develop an action plan that fixes the problem.
- Apply effective communication skills through the entire problem solving process.

Answer the following questions based on how well you satisfied the objectives.

1. How easy/hard was it to following a systematic approach for solving this problem?
2. Take a look at the questions you developed in Step 2.
  - a. Which of the questions would you consider a “weak” question?
  - b. Which question was a strong question (i.e., provided relevant information)?
  - c. How could the team have improved upon the questions they asked?
3. When going through the “data” (the cards), what criteria did you use to determine what was relevant and what was NOT relevant?
4. What criteria did you use in developing your action plan?
5. As a team, what were your strengths?
6. As a team, what areas could be improved upon?
7. What behaviors helped the team to complete its task?
8. What behaviors hindered the team from completing its task?

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<p><b>My main concern is my lawn</b></p>	<p><b>I want to get rid of the dead spots in my lawn</b></p>
<p><b>My lawn does not need fertilizer</b></p>	<p><b>My neighbor is making fun of my lawn</b></p>
<p><b>Moles have concealed ears</b></p>	<p><b>My riding mower is broken</b></p>
<p><b>Moles have soft fur and eat grubs</b></p>	<p><b>The dead spots have ridges</b></p>
<p><b>Moles make ridges</b></p>	<p><b>In the past I have always had a beautiful lawn</b></p>

<p>The lawn has never had ridges before</p>	<p>Moles work in the dark</p>
<p>Moles tunnel in search of food</p>	<p>I take great pride in my lawn</p>
<p>My neighbor's lawn does not have dead spots</p>	<p>The lawn is dying in spots and looks awful</p>
<p>Moles are eager eaters</p>	<p>My lawn is frustrating to me</p>
<p>Moles have tiny eyes</p>	<p>My push mower is working fine</p>

**My lawn does not need water**

**My lawn has good drainage**

