

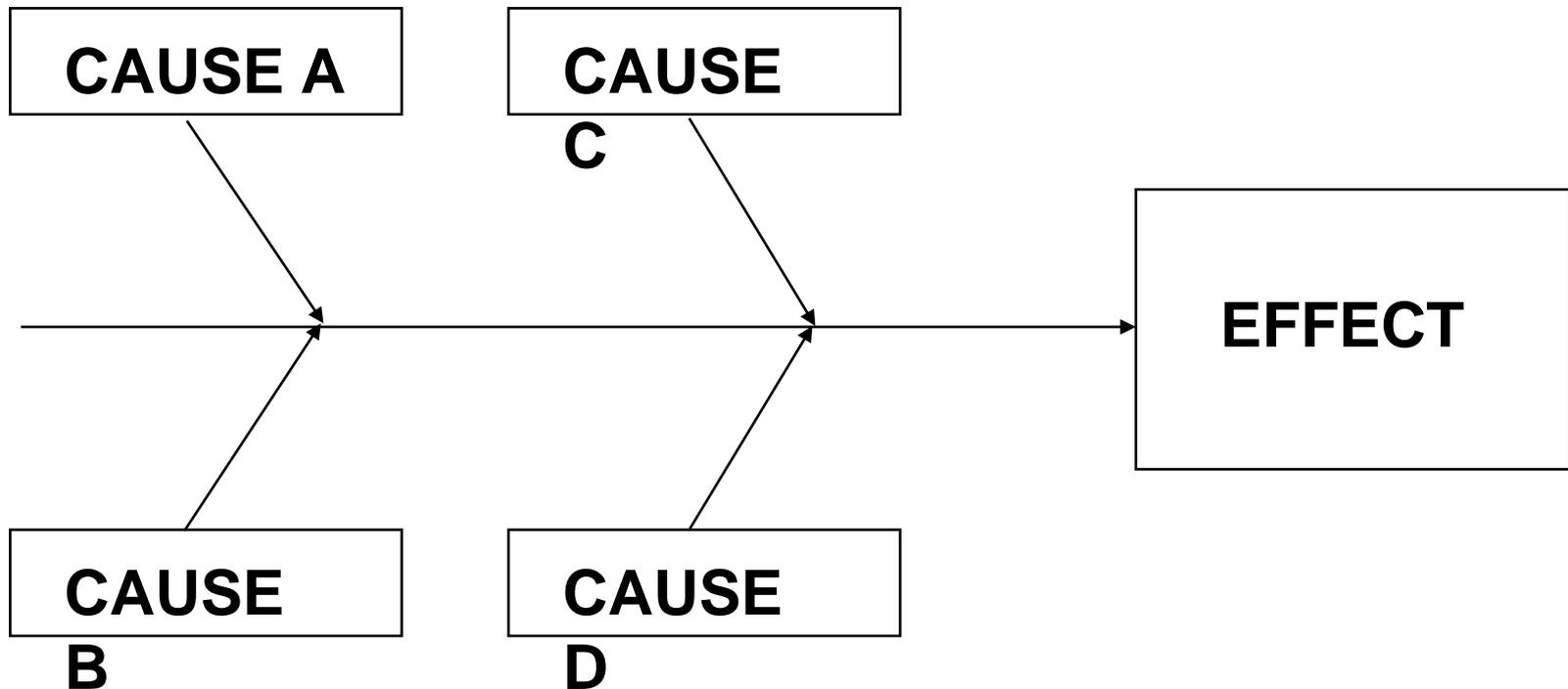
What Is a Cause-and-Effect Diagram?

A graphic tool that helps identify, sort, and display possible causes of a problem or quality characteristic.

Benefits of Using a Cause-and-Effect Diagram

- Helps determine root causes
- Encourages group participation
- Uses an orderly, easy-to-read format
- Indicates possible causes of variation
- Increases process knowledge
- Identifies areas for collecting data

Basic Layout of Cause-and-Effect Diagrams



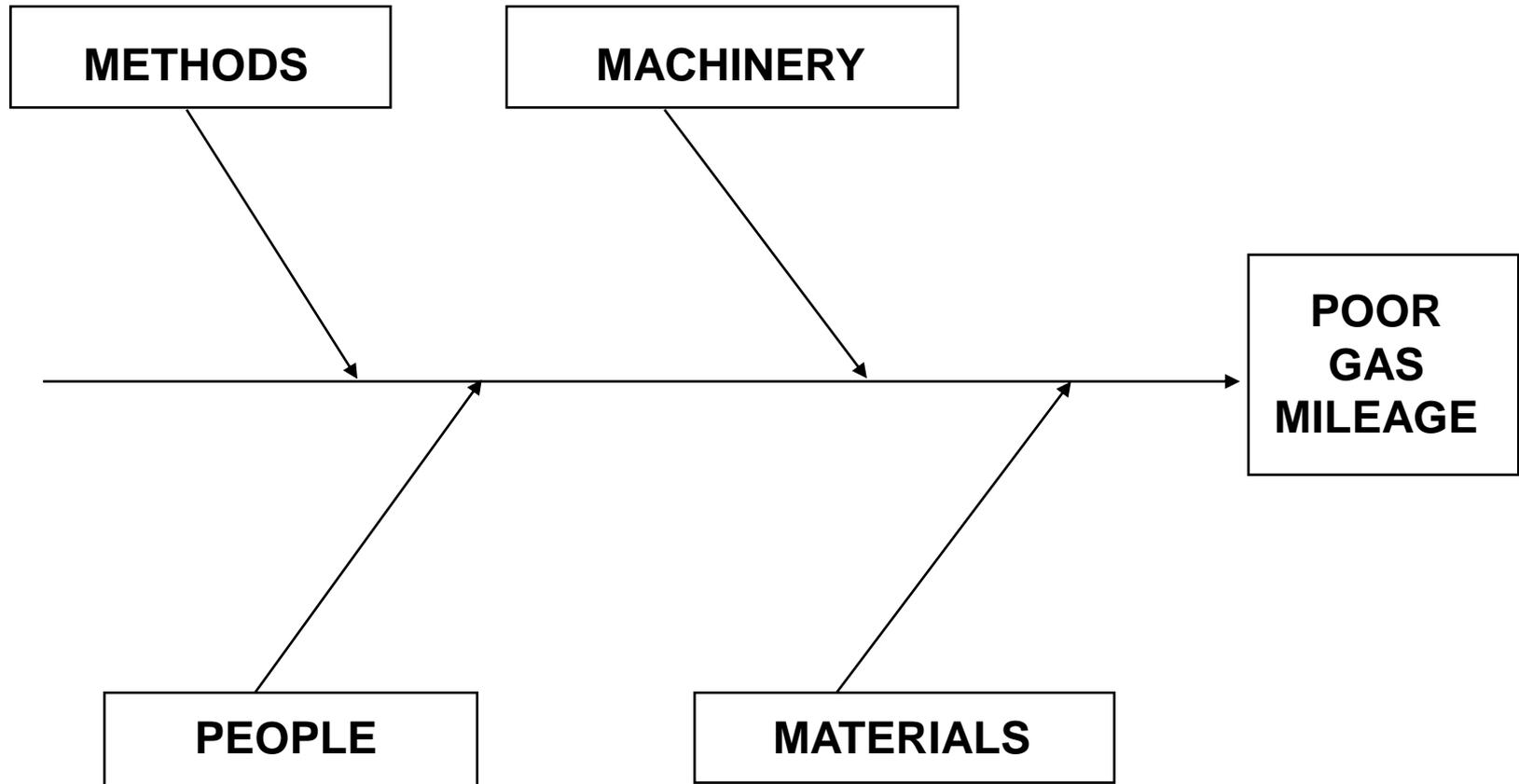
Step 1 - Identify and Define the Effect

- Decide on the effect to examine
- Use Operational Definitions
- Phrase effect as
 - > positive (an objective) or
 - > negative (a problem)

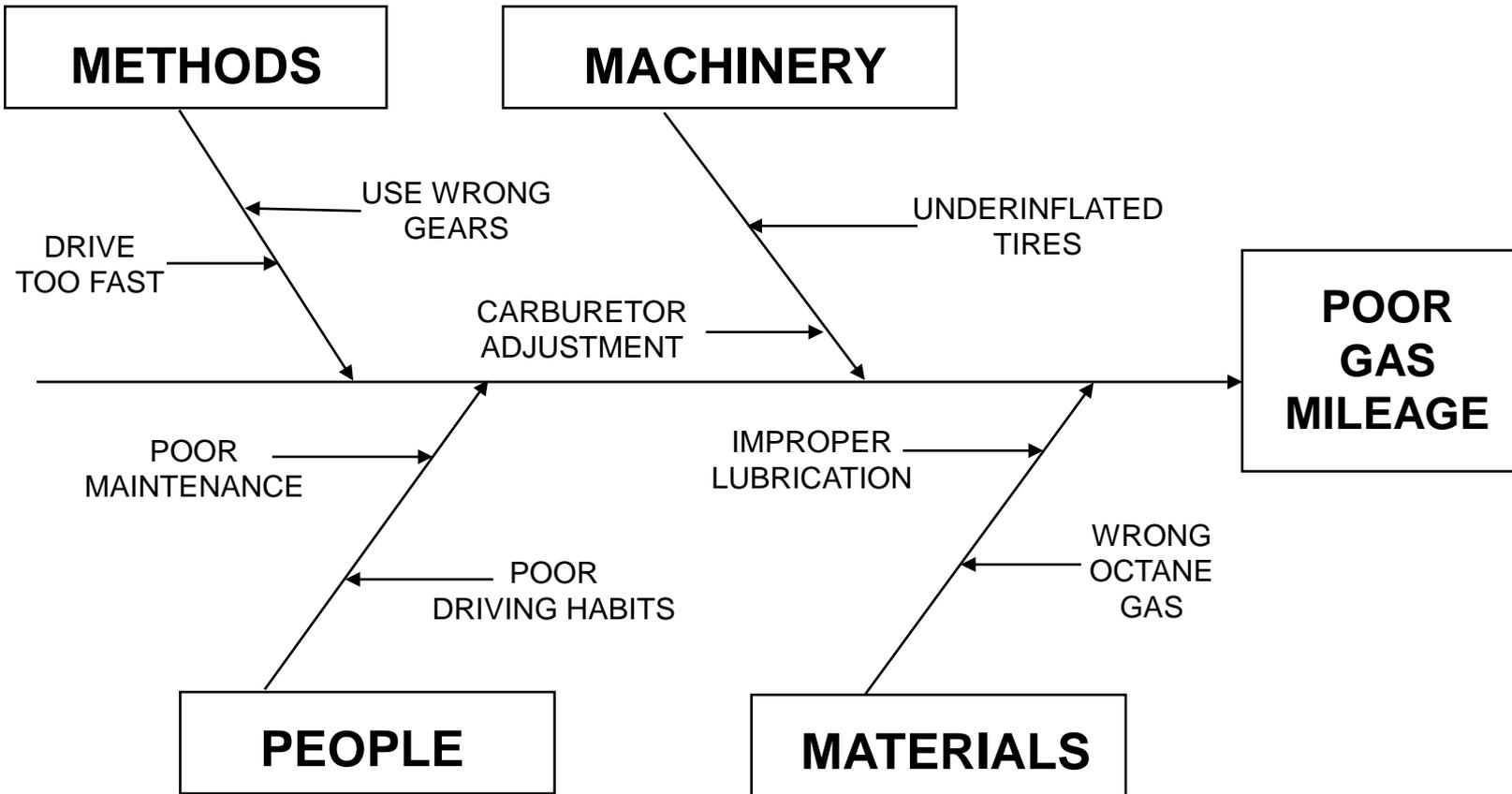
Step 2 - Fill in the Effect Box and Draw the Spine



Step 3 - Identify Main Categories

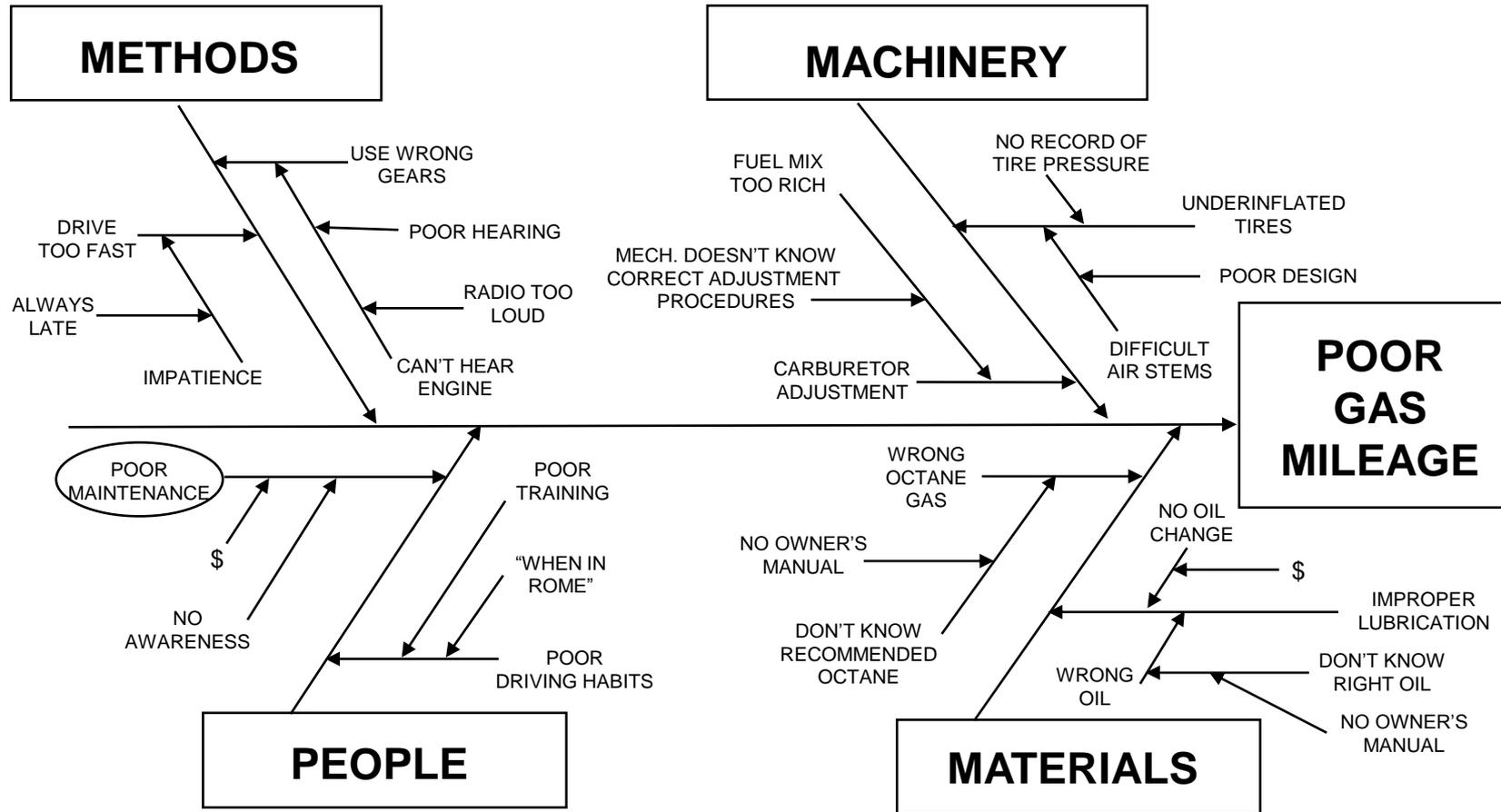


Step 4 - Identify Causes Influencing the Effect



Step 5 - Add Detailed Levels

Step 6 - Analyze the Diagram



CAUSE-AND-EFFECT DIAGRAM

Example of How the Cause-and-Effect Diagram Could Be Constructed for the Detailed Exercise

