BASIC CAUSE AND EFFECT
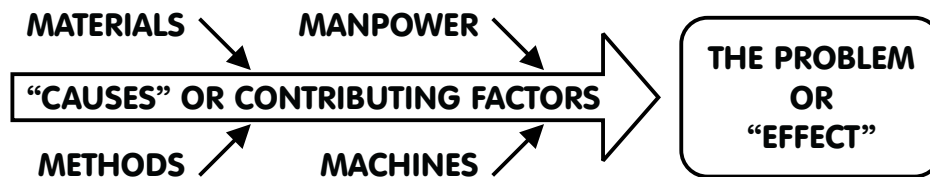## (The fish-bone diagram)

THE PRIMARY PURPOSE OF THIS TECHNIQUE IS TO HELP THE GROUP SOLVE PROBLEMS

MATERIALS   MANPOWER

"CAUSES" OR CONTRIBUTING FACTORS   →   THE PROBLEM OR "EFFECT"

METHODS   MACHINES

1. **State the problem.**

2. **Brainstorm possible CAUSES (not solutions!)**

3. **Remember WHO, WHAT, WHERE, WHY, WHEN, HOW**

    (Put ideas in categories (MANPOWER) & subcategories (attitudes))

4. **After brainstorming the diagram, then possible causes are voted upon to determine top-ranking probable causes and circle them.**

    (When examining each cause, look for something that has changed. Shifts in patterns and deviations from the norm are often good clues in problem analysis.)

5. **Rank-order the probable causes in order of importance.**
    Vote to select the most likely probable cause.

6. **Test the most probable cause. Measurements of variables may work or brainstorming may be useful. Whatever the team selects as a model for verification, it should be tried to see if it supports its conclusions.**

7. **Prepare a recommended solution.**

8. **Preparation and implementation of a recommended solution may also be achieved by brainstorming.**

9. **The recommended solution them becomes part of the "Management Presentation"**

CAUSE AND EFFECT can also be used in other ways as well:
Do a C&E when something is going well, to be able to repeat it !!
Do a C&E on a "Job Description" (as effect) to determine which
components should be included to cause it to be right.
REMEMBER ! WHO WHAT WHERE WHY WHEN HOW

R&M SEMINARS

OPINIONS AND FEELINGS ARE FREQUENTLY A PERSONAL TRIUMPH OVER GOOD THINKING
YOU DEFINE REALITY BY WHAT YOU KNOW, WHAT YOU BELIEVE, AND WHAT YOU DO ABOUT IT.