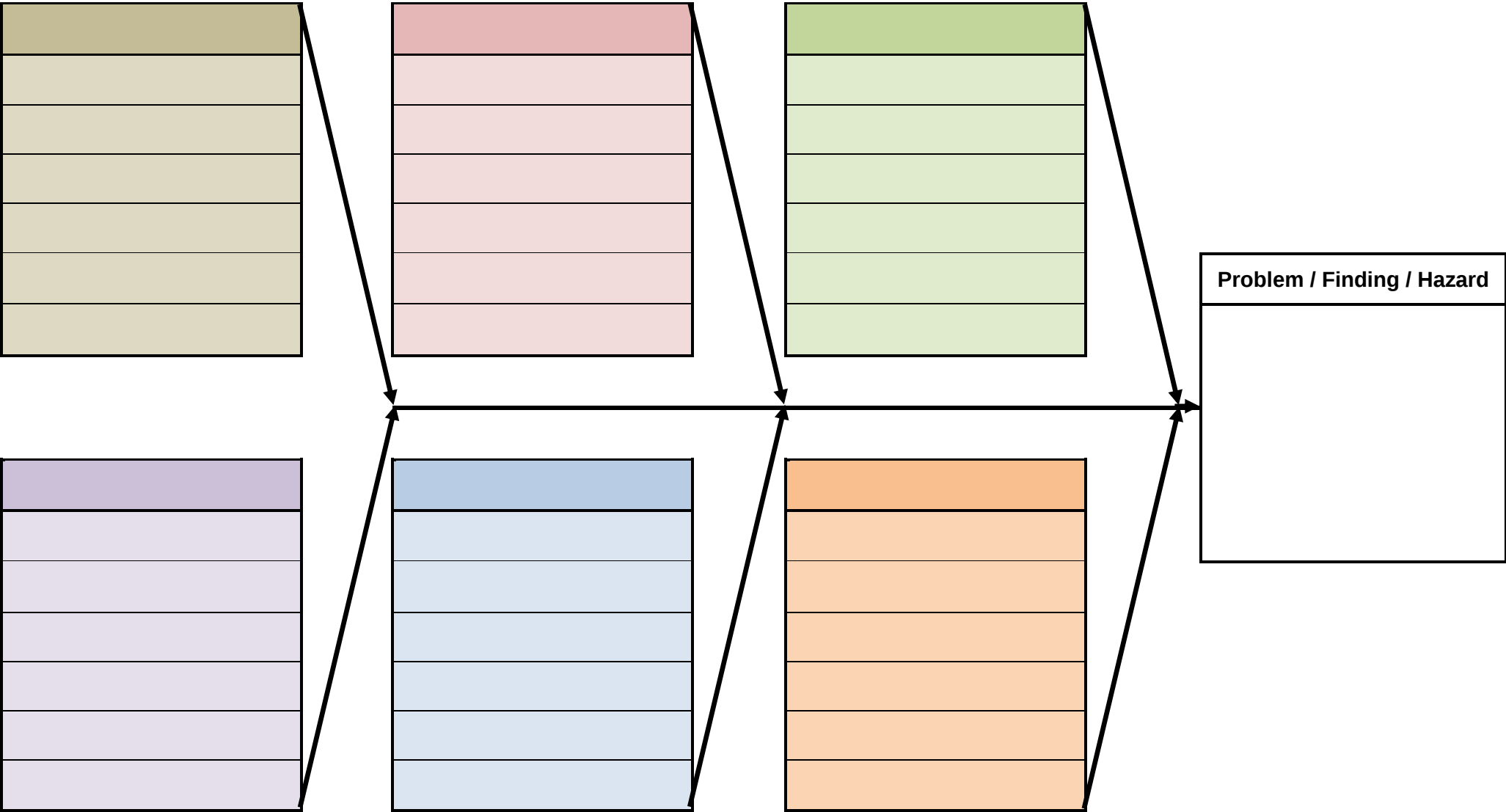


Fishbone (Ishikawa) Root Cause Analysis Worksheet

Date: _____



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Root Cause Analysis Worksheet

Root cause analysis enables us to evaluate various issues in a way which helps us identify the initial causal factor(s) which led to the condition, situation or event we now see. Its purpose is to effectively identify “Why” an issue has occurred based on appropriate analysis and evaluation.

When conducting root cause analysis, it is highly recommended and beneficial to include at least one front-line staff member close to the identified problem.

The Fishbone diagram (also known as Ishikawa diagram or the Cause-and-Effect diagram) was created with the goal of identifying and grouping the causes which generated the problem and the benefits include:

1. Structured method of identifying causes with a visual approach encourages group participation and utilizes group knowledge
2. Helpful in identifying possible causes for a problem that might not otherwise be considered by providing an opportunity for thorough exploration
3. Getting ideas of a group of people organized into a diagram may dramatically speed up the diagnosis of the problem
4. Also useful for brainstorming and risk identification / risk analysis processes

Start by agreeing on a clear and specific statement of the problem statement and enter it in the box at the right side of the diagram. Beware of defining the problem in terms of a solution (e.g., we need more of something).

Next agree on the major categories of causes of the problem and enter then in the darker shaded boxes at the branch of the diagram. The major categories of causes may be anything appropriate to the identified problem. You may also consider applying some standardized category sets as below.

1. Man, Materials, Method, Machine, Measurement, Environment
2. People, Materials, Management, Equipment, Measurement, Environment
3. Manpower, Facilities, Procedures, Equipment, Human Factors, Environment
4. Resources, Training, Procedures, Oversight, Change Management, Human Factors

Brainstorm all the possible causes of the problem. Ask “Why does this happen?” As each idea is given, the facilitator writes the causal factor as a branch from the appropriate category (in lighter shaded fields the fishbone diagram). If it applies, the same causes can be written in several different categories.

Continue to ask “Why does this happen?” about each cause and write sub-causes in the next field within that category to generate deeper levels of causes. To identify the root cause(s) from all the ideas generated, consider reaching a group consensus on the most significant causes identified.

Tips:

1. Consider drawing your fish on a flip chart or large dry erase board.
2. Encourage each person to participate in the brainstorming activity and to voice their own opinions.

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3. Note that the “five-whys” technique is often used in conjunction with the fishbone diagram – keep asking why until you get to the root cause.