

# CRAFTSMAN'S CRIBSHEET

NUMBER  
**10**

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## POWERHOUSE BRAINSTORMING TO FIND ROOT CAUSES

Brainstorming sessions are very ineffective in their use of time. Assembling a number of people, letting them speak (produce) only one at a time, and the pressure to not offend others and avoid organizational taboos reduce the effectiveness of small group brainstorming.

Powerhouse Brainstorming is a method that unleashes the power of all attendees in a short amount of time, and produces output that can then be immediately analyzed by the group.

Powerhouse Brainstorming consists of five simple steps:

1. Give each member of the team three sticky notes in two different colors, red and yellow, so they each have six total sticky notes.
2. Red notes first. Pair up team members and ask them to stand up, and then each is to come up with three ideas which the other records, one idea per red sticky note. After each has contributed and recorded their three ideas, they sit down. Collect the six red sticky notes from each pair and set them aside.
3. Next repeat the process, using the yellow sticky notes.
4. After everyone has finished, ask them to put the yellow sticky notes on the white board under the headings of the Cause and Effect, or Fishbone Diagram: Man, Materials, Machine and Methods. Just the yellow notes. Keep the red notes separate.



5. After everyone has had a chance to post their notes and look at what the others have posted, ask if there is a consensus about the most likely cause or causes. Allow the group to discuss.

If the team cannot come to an agreement about the most likely causes to be investigated, then you can return to the red sticky notes to mine for further ideas. If the group has come up with two very strongly held but different ideas, congratulations, the answer will not be in between their points of view, but the problem is sure to be!

Usually, the red sticky notes from the first round are the "easy to come up with" answers, the ideas on the yellow sticky notes from the second round are the result of everyone thinking a little more deeply about the problem. By putting people in pairs, politically correct or showboating answers are avoided, and the small grouping enforces that each pair comes up with their share of ideas.

In less than 30 minutes you can come up with six ideas from each participant, and have the best half of them classified and discussed on their merit. That's why we call it Powerhouse Brainstorming!

All Craftsman's Crib sheets are available for viewing and download at [pmpa.org/knowledge-tools/craftsmans-cribsheets](http://pmpa.org/knowledge-tools/craftsmans-cribsheets)