

Steps:

1. State your problem, issue, or challenge.
2. List your assumptions and presuppositions - aim for at least 5.
3. Write down the most extreme opposite of your assumptions.
4. Transform the opposites into 'how' or 'what if' questions.
5. Write at least 3 answers to each question.

Example:

1. In what ways can I make a better pest trap?
2. Assumptions:
 - a. It has to kill the pest
 - b. It has to attract the pest to it
 - c. It is not safe around children or pets
 - d. You have to continually monitor it for effectiveness
 - e. The pests need to be dealt with at all
3. Opposites:
 - a. It has to sustain the pest
 - b. It has to repel the pest
 - c. It can double as a toy for kids and pets
 - d. You set it and forget it forever
 - e. Pests need to be left alone to do their thing
4. Questions:
 - a. How can the trap sustain the pest?
 - b. How can the trap repel the pest?
 - c. How could the toy be used as a toy for kids or pets?

- d. How could you continually monitor the trap for effectiveness?
 - e. How could you totally leave the pests alone to do their things?
5. Answers:
- a. How can the trap sustain the pest?
 - i. Completely contained 'pest biodome' with *entry only* path
 - ii. Provides soothing music to calm the pest into submission
 - iii. Incorporates pest's usefulness into normal house functions
 - b. How can the trap repel the pest?
 - i. Use smell, shape, light, or sound to scare the pest away
 - ii. Automated robot repellent system (Roomba + anti-pest module)
 - iii. Sucks pest up and delivers outside through tubing system
 - c. How could the toy be used as a toy for kids or pets?
 - i. Use non-toxic items with trapping mechanisms only accessible by pests
 - ii. Blend the trap into the home / decorations
 - iii. Make it touch sensitive to sound / light alarm when disturbed
 - d. How could you continually monitor the trap for effectiveness?
 - i. Remote monitoring system tied into home cable / internet
 - ii. Make it spring-able and resettable after a set amount of "cool-off" time
 - iii. Design to trap, wrap, and scrap pest on a set schedule / events
 - e. How could you totally leave the pests alone to do their things?
 - i. Seal the house off from pests from the outside
 - ii. Designate certain areas of the house as "pest-safe-havens" to come and go
 - iii. Incorporate 'opposite' or predator pests to deal with main pests