Problem Solving

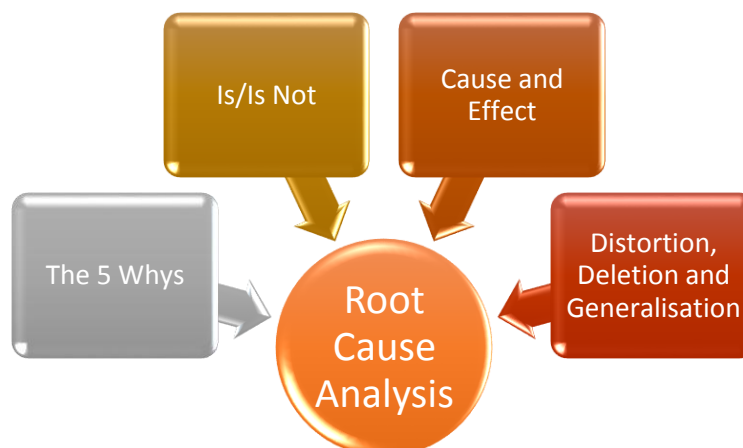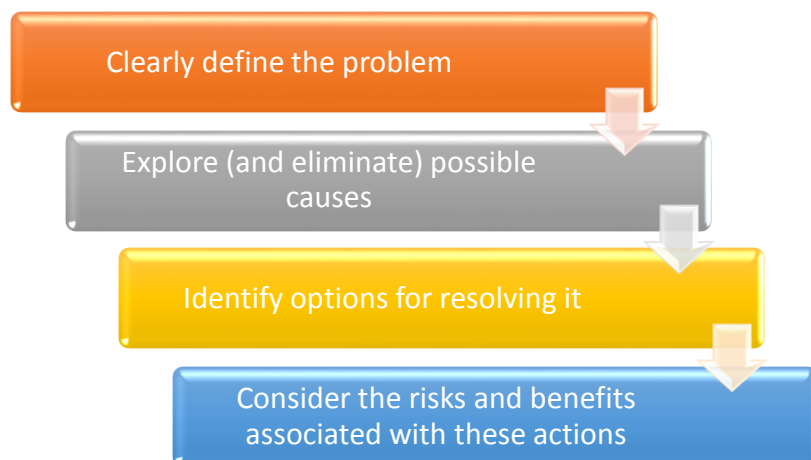|		
A matter or situation regarded as unwelcome or harmful and needing to be dealt with and overcome	A thing that is difficult to achieve	An inquiry starting from given conditions to investigate or demonstrate a fact, result, or law
A question to be considered, solved, or answered	A misgiving, objection, or complaint	Any situation or matter involving doubt or uncertainty

Defining the Problem

"If I had 60 minutes to solve a problem, I'd spend 55 minutes defining it, and 5 minutes solving it" - *Albert Einstein*

"Half the solution to any problem lies in defining it"

- Clearly define the problem
- Explore (and eliminate) possible causes
- Identify options for resolving it
- Consider the risks and benefits associated with these actions

Is/Is Not

Cause and Effect

The 5 Whys

Distortion, Deletion and Generalisation

Root Cause Analysis

Identifying Possibilities

The very nature of a 'problem' creates a sense of urgency to resolve it. However, in many situations the key thing is to keep an open mind for as long as possible, and not focus on the first viable option that comes to mind. Sometimes a quick and easy solution is nothing more than a temporary fix, and the problem will keep recurring.

Taking the time to find a permanent solution is always worth it in the long run.

Whilst it is important to be systematic when defining the problem, we need to be more creative when identifying possible solutions.
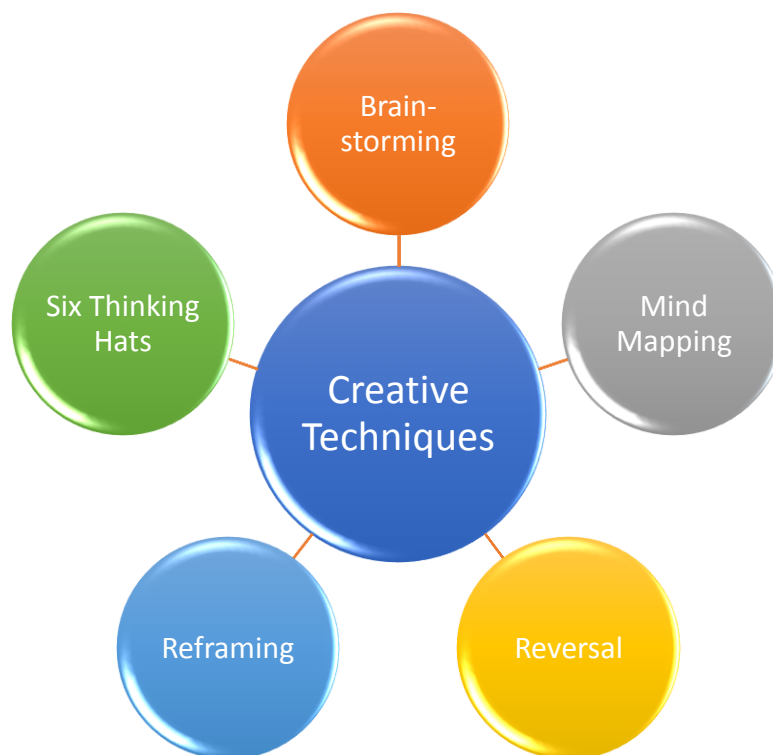
"Problems are like opportunities with thorns on them"

Hugh Miller