# Principles of Alchemy

* An alchemical mixture contains between 2 and 6 (inclusive) ingredients, consisting of
  + Brimstone (b)
  + Aqua Forte (a)
  + Quicksilver (q)
  + Lead (l)
  + Phosphor (p)
  + Nitre (n)

, arranged in a sequence. E.G. qaba

* Each ingredient may react with the ingredients adjacent to it. For example, qaaba has the following possible reactions:
  + q and a
  + a and a
  + a and b
  + b and a
* There are four possible ways a pair of ingredients can react:
  + **No Reaction** means they are inert. If they cause no reaction, then it doesn’t matter which way round they go.
  + **A Weak Reaction** means that if they were the other way round, you would get a strong reaction. If a pair of ingredients is identical (e.g. “aa”), then it cannot have a weak reaction because it is the same both ways around.
  + **A Strong Reaction** means that if they were the other way round, you would get a weak reaction. More importantly, it means you will get one of the following effects:
    - "1 Gold",
    - "1 Brimstone Powder",
    - "1 Aqua Forte",
    - "1 Quicksilver",
    - "1 Lead Dust",
    - "1 Phosphoric Salt",
    - "1 Nitre",
    - "The Mixture has Essence of Mind",
    - "The Mixture has Essence of Body",
    - "The Mixture has Essence of Spirit"

These effects will always be present in any game, and each one will occur only once.

* + **An Exhaustible Strong Reaction** means you get one of the following effects the first time you trigger it, you will get one of the following effects.
    - "3 Dice",
    - "3 Gold",
    - "6 Gold",
    - "You have found [Ingredient] has this many lateral reactions:",
    - "You have found [Ingredient] has this many vertical reactions:",
    - These effects may or may not be present in any one game, and they may occur multiple times (Although you will never be given the same information twice for the information on reactions).
    - The effects which give you information about how many reactions an ingredient has are referring to all kinds of strong reaction.
    - If you trigger an exhaustible reaction again, you will still be informed about it in the future, but will not get the additional resources.
* When you mix ingredients, you will be told how many strong reactions occur, how many weak reactions, and how many reactions are exhausted by previous mixtures.
* The Philosopher’s Stone is made when all 3 essences are produced in a single mixture.