Transmutation

# Overview

Transmutation is a competitive or solitaire puzzle game in which players are Alchemists trying to deduce the alchemical recipe of the “Philosopher’s Stone”.

# Components

* 1x Game sheet per player
* 1x pencil and rubber (eraser) per player
* 1x Smartphone/laptop/computer/tablet with access to the web-app per player
* 10x dice per player
* 15x white counters per player
* 1x coloured counters per player

# Setup

1. Give each player a Game sheet, 5 dice, a coloured counter, a pencil and a rubber.
2. Each player should roll their 5 dice, and place them on the corresponding storage spaces in the inventory. If players roll any 6s, they can place these wherever they like. If it is your first game, simply reroll 6s until they are not a 6.
3. Each player should place their coloured counter on the “30” of the gold tracker.
4. Each player should use their smartphone, or (other device) to go to the link above. Put in the following numbers:
   1. As a group, pick a number between 0 and 100,000,000. All players should enter this number as the “Game seed”.
   2. Pick a starting player. They should put in “1” as their player number. Each player should put in their number around the table.
   3. Each player should put in a difficulty level, where 0 is the hardest and 5 is the easiest. It is recommended to use 4 for a first game.
   4. The webapp will give each player some starting information. Players should note this down on their player sheet in accordance with the “Principles of Alchemy – Recording Results” section.

# How to play

1. Starting with the starting player, a player may do one of the following things on their turn:
   1. Use 1 gold to reroll as many of their dice as they want.
   2. Use [x] gold to buy [x] specific ingredients.
   3. Use 3 gold to mix 2 ingredients
   4. Use 2 gold to mix 3 ingredients
   5. Use 1 gold to mix 4,5, or 6 ingredients.
2. If any player successfully mixed the “Philosopher’s Stone” they should declare it to the group.

# Principles of Alchemy

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

, arranged in a sequence. E.G. qana

* Each ingredient may react with the ingredients adjacent to it. For example, qaan has the following possible reactions:
  + q and a
  + a and a
  + a and n
* 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 you will get one of the following effects:
    - "3 Nitre",
    - "3 Aqua Fortis",
    - "3 Quicksilver",
    - "3 Lead Dust",
    - "3 Phosphoric Salt",
    - "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.
    - "2 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.