## Empedocles' Stones

## ABOUT THE GAME

These are the rules to the "classical variant" of a game called Empedocles' Stones. The game is for two players, and played on an $8 \times 8$ square board (aka a chessboard). A chessboard and four colours of playing counters are all that is needed to play.

## SETUP

The player who moves first is selected - either randomly or by agreement. Each player takes it in turns to select one of the four types of playing pieces - fire, air, earth, water. This gives a set of three distinct games depending on the combinations picked.

The player who will move first may then place three of their pieces in any formation anywhere on the board. The other player then does likewise.

## GAMEPLAY

Each player must roll one die before their turn.

## 1-2 Transmutation

3-5 Move as normal
6 Move twice

## MOVING

A "move" consists either of moving a single piece, usually one space, or of placing a new piece on the board.

When moving pieces, remember that diagonals may be moved, and that where a piece moves multiple times in a turn it is permitted to change direction. Only one piece may occupy each square at the end of a player turn.

## CAPTURING

Other pieces may be captured, with each of the four types of piece having specific rules as to which other pieces it may take and in which circumstances. In all cases, capturing involves moving into the same square as the piece being taken. Capturing another piece ends the
movement of the attacking piece, and only one capture may ever be done in the course of a move (though if a 6 is rolled, a piece may move twice and capture both times).

## PLACEMENT

A player may place a new piece on any square that:

- Has precisely three neighbours (no more and no less!)
- Where at least one of those neighbours is a piece belonging to the player

If a player has rolled to "move twice", they may use the first move to place and the second to move the newly placed piece.

## TRANSMUTATION

A transmutation occurs when the player whose turn it is rolls a 1 or a 2 on their die.
Each piece on the board must then be checked to see if it has too many or too few neighbours, according to the table below. Numbers of neighbours given include diagonals and include pieces belonging to both players.

| Type | Permitted \# of neighbours |
| :--- | :--- |
| Fire | $2-4$ |
| Air | $1-3$ |
| Water | $2-4$ |
| Earth | $2+$ |

## When a transmutation occurs, and

Following the transmutation, the player who rolled it may make one move as normal.

## GAME PIECES

FIRE

- May move 1 square
- May capture any piece
- May have 2-4 neighbours


## WATER

- May move one square
- May only capture fire pieces
- Other friendly pieces may move on top of water and gain +1 square of movement by doing so (such that they can move along chains of water). They may not end the turn on top of a water square
- May have 2-4 neighbours


## EARTH

- May move one square
- May capture any other piece, but only via a "hammer and anvil"; there must be another friendly piece, or a board edge, directly opposite the attacking piece in a straight line.
- May have 2+ neighbours, making it immune to overcrowding

AIR

- May move 2 spaces when moved (though note the rules on capturing)
- May only capture earth pieces
- May have 1-3 neighbours


## VICTORY

Victory is achieved when all the opponent's pieces have been removed from the board and only one player's pieces remain. If a situation occurs whereby nobody can move or place a piece, the player with the most pieces on the board is the winner.

It is possible to achieve a stalemate, if either all the pieces on the board die in a transmutation or where there are only two pieces left such that they cannot avoid both being destroyed next time a transmutation is rolled.

There is a further categorisation of victory, the "Pyrrhic" win - achieved when a player successfully wins, but such that their pieces would be unavoidably removed by the next transmutation. A classic example would be where an opposing air and water piece remained; the water will be removed first by the transmutation as its neighbouring air piece can survive only having a single neighbour, granting the air player victory. The remaining air piece, however, cannot survive another transmutation, making the victory Pyrrhic.

