## The Summer-House Floor

The Summer-House Floor is the collective name for Trig, Trigger and Triggest: a family of three board-games of pure skill for two players, invented by Richard Moxham in 1996.

Trigger and Triggest differ from Trig (the root game) in very few respects: essentially, the shape and size of the board and the range of conditions defining victory. Because even these differences are relatively slight, a comprehensive description of Trig, followed by a simple statement of the points of divergence of the other two games, should suffice to make all clear.

## 1. Trig

### 1.1 Playing equipment

1.1.1 Trig is played on a regular hexagonal board, itself a tessellation of 127 regular hexagonal cells (see Fig 1).


Fig 1: Playing board for Trig
1.1.2 The centre cell (coloured black in the diagram) is known as the Pillar.
1.1.3 Of the 126 non-black cells, 84 (pink or green in the diagram) constitute the active playing territory. The other 42 (shown as cream) are merely separators.
1.1.4 The Pillar apart, differences in colour between cells are significant only as an aid to orientation. (See 3. Helpful tip, below).
1.1.5 Every pink or green cell has at its centre a hole designed to receive one of the pegs which are the game's playing pieces.
1.1.6 Each player - Black and White - is provided with a stock of pegs of corresponding colour. 60 black and 60 white should be sufficient for the completion of any game.

### 1.2 Object of the game

1.2.1 To be the first player to occupy with pegs of his/her own colour an unbroken cell-chain of any length which either:

- encloses the Pillar anywhere within it;
or
- links the Pillar to the edge of the board.


### 1.3 Playing procedure

1.3.1 White and Black make alternate moves. White moves first.
1.3.2 A move always consists of either:

- a single placement
or
- a single placement plus a single capture arising directly from it.
1.3.3 A placement consists in occupying, with a peg of the player's own colour, a single vacant cell adjacent to:
- the Pillar
and/or
- a cell already occupied by a peg of either colour.

Thus, White's first placement must be adjacent to the Pillar.
1.3.4 A capture becomes available when a placement completes an equilateral triangle of any size:

- whose other vertices are likewise pegs of the player's own colour
and
- at whose exact centre stands an opposition peg.

These conditions being met, the capture is effected by removing the opponent's peg and replacing it with one of the player's own.

## Notes

- Where a placement creates multiple capturing options, any one of those options (but only one) can be executed.
- A capture not executed as part of the move which made it possible, can never be executed thereafter.
- A vacant cell at the centre of an already-completed equilateral triangle of opposing pegs, can be occupied with impunity.
- An equilateral triangle of similar pegs completed by a capture rather than by a placement, creates no opportunity for capture.
- There is no penalty for refraining from capture.


## 2. Trigger and Triggest

### 2.1 Playing equipment

2.1.1 Trigger is played on a board which is a conflation of two Trig boards (see Fig 2).


Fig 2: Playing board for Trigger
2.1.2 Triggest is played on a board which is a conflation of three Trig boards (see Fig 3).


Fig 3: Playing board for Triggest
It will be noted that, instead of the single pillar to be found on a Trig board, Trigger has two and Triggest three.

### 2.2 Object of the game

2.2.1 (In Trigger and Triggest alike) to be the first player to occupy with pegs of his/her own colour an unbroken cell-chain of any length which:

- encloses one or more Pillars anywhere within it
or
- links any Pillar to the edge of the board
or
- links a Pillar to another Pillar.


### 2.3 Playing procedure

2.3.1 (In Trigger and Triggest alike) a placement consists in occupying, with a peg of the player's own colour, a single vacant cell adjacent to:

- any Pillar
and/or
- a cell already occupied by a peg of either colour.

Thus, White's first placement must be adjacent to one of the Pillars.
In all other respects, the rules and playing equipment for Trig apply equally to Trigger and Triggest - except perhaps that, in theory, a greater number of pegs might be needed for games on the larger boards.

## 3. Helpful tip

With the boards coloured as shown, any equilateral triangle which can be used for purposes of capture (and the number of such triangles approaches 500 in Trig, 1000 in Trigger, and 2000 in Triggest) will necessarily have all of its vertices located in cells of a common colour: in this case, all pink or all green.

In play, this provides a convenient point of reference, for, whilst the more straightforward triangles (those which, as in Figs 4 and 5, are closely concentrated and radiate directly from a side or a vertex of the target cell) leap quite readily to the eye, further-flung and - especially - 'rotated' instances (Fig 6, say) can be harder to spot.


Fig 4


Fig 5


Fig 6

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