

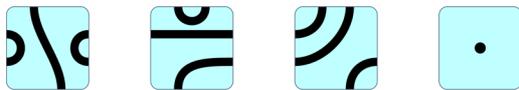
A tile-based puzzle game system by
Fred Horn

INTRODUCTION

Gloop (Get LOnger Or Perish) is a series of puzzles and games by Fred Horn, played with 91 special square tiles.

TILES

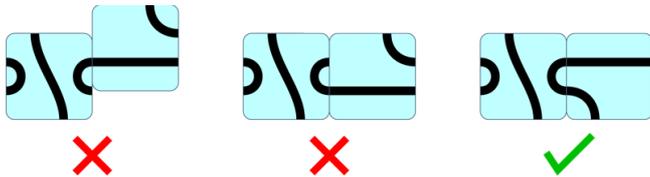
The Gloop tiles show all possible ways that paths can be drawn within a square with two points on each side, such that each path connects two different points and no paths intersect. Here are some of the 91 Gloop tiles:



The blank tile with no path segments is indicated by a dot.

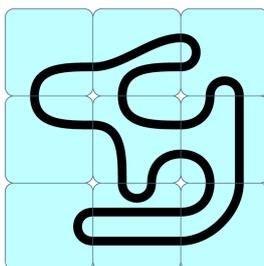
BASIC RULE

Tiles must always align with neighbouring tiles and all path ends must eventually be met by neighbouring path ends. For example, only the rightmost pairing below is valid:



Bad (not aligned) Bad (path cut off) Good

Every path will therefore be closed when a packing is complete, such as the following 3x3 example:



PUZZLES (1 player)

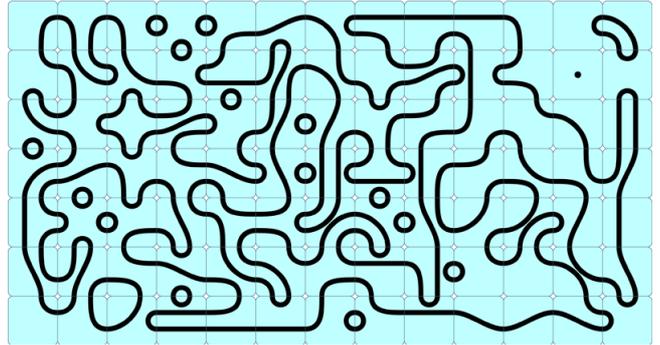
Challenge 1. Pack all 91 tiles into a 7x13 rectangle to make a set of closed paths.

- 1a. What is the smallest number of paths you can make?
- 1b. What is the largest number of paths you can make?

Challenge 2. Pack all 91 tiles into a 7x13 rectangle to make one long closed path and any number of small circles.

- 2a. What is the smallest number of circles you can make?
- 2b. What is the largest number of circles you can make?
- 2c. Can you get all circles inside the long path?
- 2d. Can you get all circles outside the long path?

Here is a packing prepared earlier by J. A. M. Mes from Holland, consisting of 17 closed paths. Can you do better?



Note: Do **not** try to pack all 91 tiles to make a single closed path! This is impossible. Five paths is the theoretical minimum, although this has not yet been achieved.

Challenge 3. Remove the empty tile to create a 90-tile set, and repeat the above challenges in a 9x10 rectangle, or, for a more difficult challenge, a 6x15 rectangle.

STRATEGY GAME (2-8 players)

The Gloop tiles can also be used for a domino-like strategy game, for 2-8 players. The game is best played with the empty tile removed, to make an even 90 tiles.

Preparation: Place the 90 tiles face down in a shared **pool** and shuffle them. Each player randomly draws six tiles to their **hand**, which are kept hidden from opponents.

Aim: To get rid of all of your tiles.

Start: The opening player randomly draws two tiles from the pool and places them together in the middle of the playing area, so that they match. If the tiles do not match in any rotation, they are returned to the pool and another pair drawn, until a matching pair is found.

Play: Players then make one of the following moves per turn, starting with the opening player and continuing clockwise:

1. Take four tiles from your hand and place them in front of you in your **area**, to make a matching 2x2 formation.
2. Move one of your 2x2 formations from your area to extend the central group at either end. The 2x2 formation must move as a unit but can be rotated, and must match **two** existing tiles of the last formation played at that end. Extensions right of the starting pair can not turn left and extensions left of the starting pair can not turn right.
3. If neither move 1 or 2 can be performed, then randomly draw two tiles from the pool and add them to your hand.

End: The game is immediately won by any player who has no remaining tiles after their move, either in hand or in their area. The last move must have been a type 2 move.

If the pool runs out before a player wins, then players score -1 pt for each tile in their area and -3 pts for each tile in hand, and the player with the least negative score wins. The game is drawn if scores are tied.

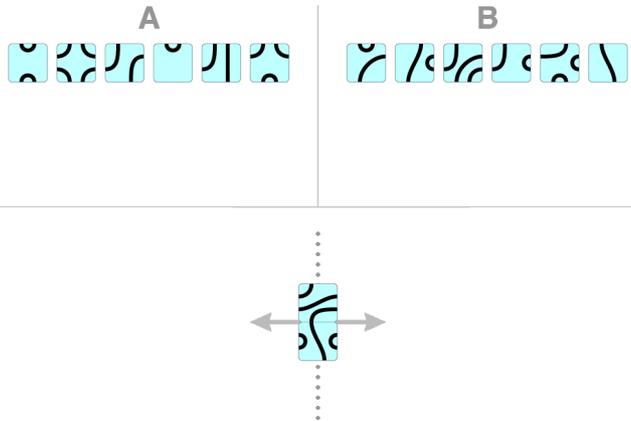
Note: The paths on acrylic "ice" tiles can show through the back of the tile. If this is a problem, stack the pool tiles into piles of two. This also makes type 3 moves easier.

EXAMPLE GAME

Here is an example game between two players, A and B. Directions of growth for the central group are shown.

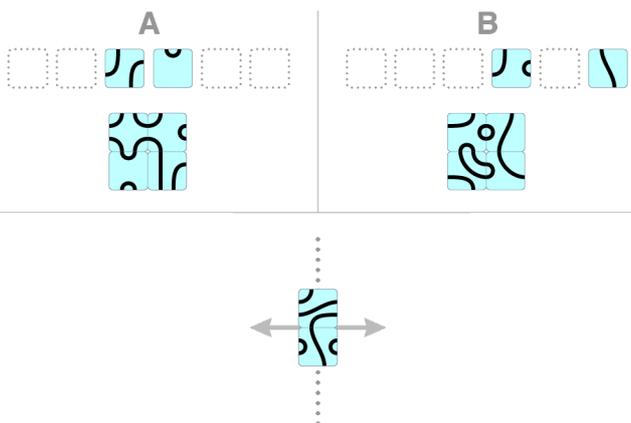
Start

Here is a typical starting position for two players. Both players have drawn six tiles. Player A has made the central matching pair, and begins.



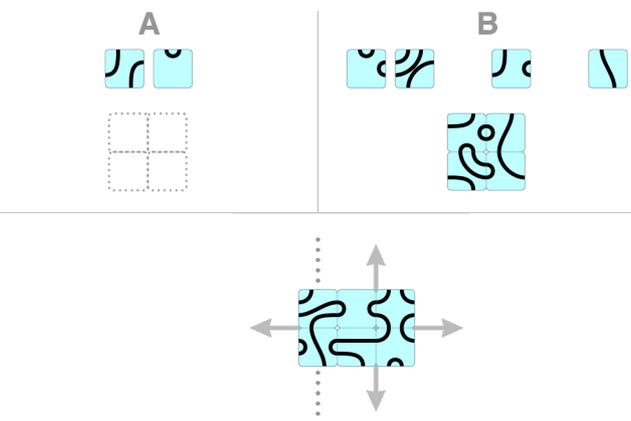
Round 1

Both players make a 2x2 formation in their area.



Round 2

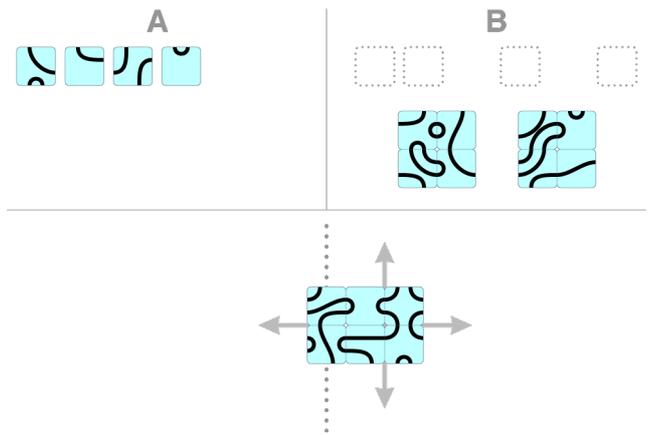
Player A extends the starting pair with their 2x2 formation (rotated). Player B can not further extend the central group, so must collect two new tiles for their hand.



The central group can now grow in three directions on its right side, from the extremity just played.

Round 3

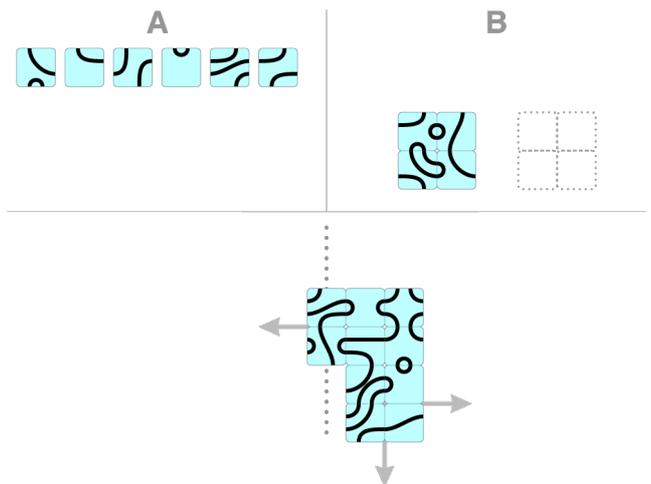
Player A must now collect two new tiles. Player B makes a second 2x2 formation in their area.



Player B has emptied their hand, but still has tiles in their area, so does not win immediately.

Round 4

Player A can not make a 2x2 formation yet, so must collect two new tiles. Player B extends the central group with their second 2x2 formation.



The central group can now grow in two directions on its right from the extremity just played. It can still only grow in one direction on its left, until extended in that direction.

And So On...

And so the game continues, until either a player wins by completely emptying both their hand and area of tiles, or the pool runs out and players compare scores.