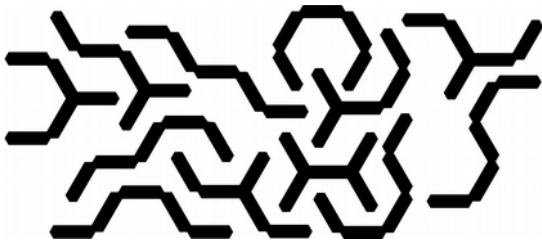


A game for 2 players with a variant for 3 or 4 by
Néstor Romeral Andrés

INTRODUCTION

Twigs is a tile-laying game that uses polytwigs¹ of 5 segments called 'pentatwigs'. There are 12 different pentatwigs (discarding symmetries):



The pentatwigs

Players alternate turns placing one of their pentatwigs according to some simple rules, trying to enclose as many areas as possible.

Note that some of the twigs are not symmetric, and can be placed with either side up.

MATERIAL

- 12 pentatwigs of each colour² (24 in total) — we'll call them 'twigs' hereafter.
- 15 discs of each colour.
- Carrying case

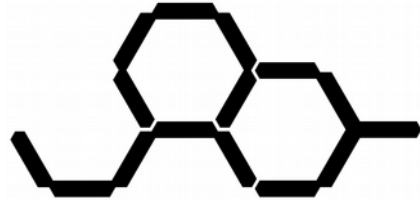
RULES

Each player has an allocated colour (black or ice). Ice starts by placing an ice twig on the playing surface. From now on, starting with Black, players alternate turns placing one of their twigs on the table 'touching' at least one already placed twig so that:

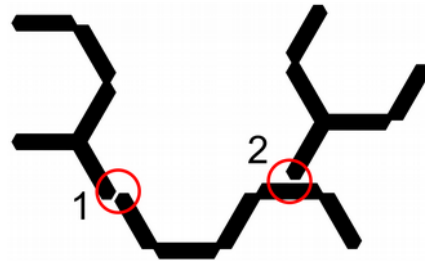
¹ Hexagonal-grid polysticks; polysticks are the edges from a regular grid.

² Two sets are available: Ice+Black and Red+Blue. See 3-4 player variant.

- The **first twig** Black places must be of a different shape than that the one Ice played (to prevent rotationally-symmetric defensive play).
- The twigs must be placed so that their segments act as edges of an imaginary hexagonal grid. Notice that a maximum of 3 segments can converge into a single vertex, and they form a 120° angle (1/3rd of a circumference) with each other. Notice also that twigs only touch at the ends of segments (see examples below).

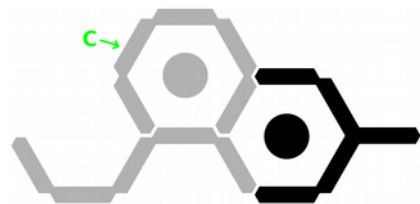


Examples of legal placements



Examples of illegal placements:
 1: Not a 120° angle
 2: Not at the end of a segment

As soon as one or more hexagons are created, the player with the majority of segments surrounding each hexagon places a disc of her colour inside it. In case of a tie for a hexagon, it remains unclaimed.

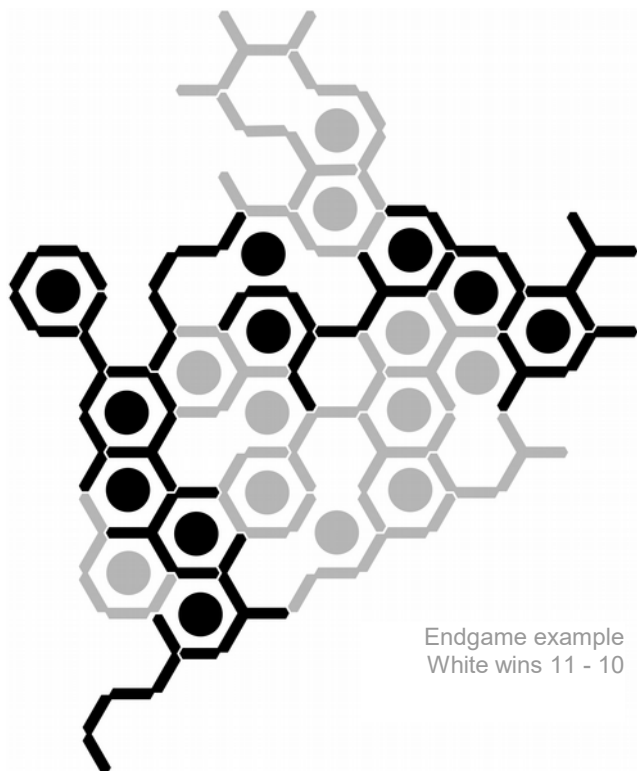


Example: Ice places the 'C' twig, creating 2 hexagons, one for each player

GAME END

The game ends after all twigs have been played (and enclosed hexes have been claimed). Next, players claim any larger enclosed areas (if any) according to the same majority rules that were used to claim individual hexes (see endgame scoring example below).

The player who has claimed more areas wins the game. In case of a tie, play again.



Endgame example
White wins 11 - 10

VARIANT FOR 3 OR 4 PLAYERS

You'll need a second set of Twigs in red and blue to play this variant. Each player has an allocated colour.

Play as usual taking turns in clockwise order. Areas are claimed by the player with more segments surrounding them. Ties are more frequent than in 2 player games, but it's ok.

VARIANT

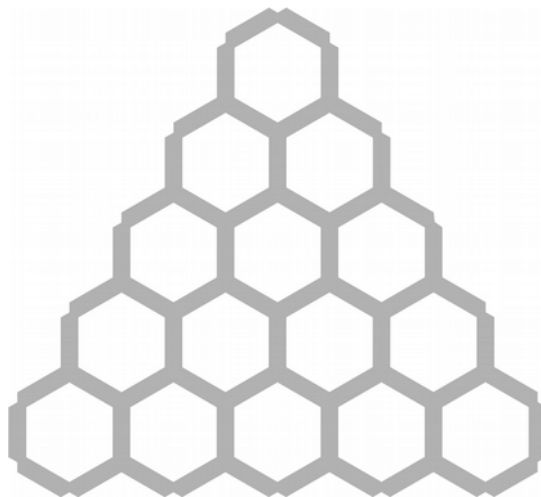
Each area is worth as many points as its size (the number of imaginary hexes it comprises), instead of 1 point.

PUZZLES

Don't cheat by searching online! That wrecks the fun!

The triangle

Arrange all 12 twigs of a single colour into the following triangle:



15 hexes

Can you create other arrangements that also have 15 hexes?

The maximum

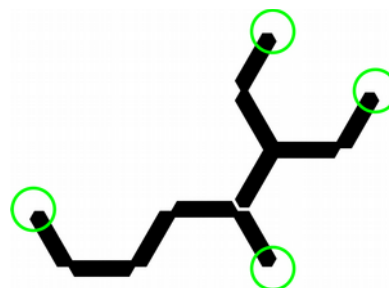
Arrange all 24 twigs according to the rules to create the maximum number of hexagons possible.

The ring

Arrange all 12 twigs of the same colour to enclose one single area according to the rules so that the size of this area is as large as possible.

The tree

Arrange all 12 twigs of the same colour according to the rules so that the number of leaves (ends of unconnected segments) is maximized.



Examples of leaves (unconnected ends)