

# Tiles – Worksheet

## Let's try a little game!

Have you ever heard of the game [Tantrix](#)? It is a tile-based game in which the players compete to obtain the longest path in their designated colour.



Image source: [https://commons.wikimedia.org/wiki/File:Tantrix\\_discovery\\_2.jpg](https://commons.wikimedia.org/wiki/File:Tantrix_discovery_2.jpg)

Let's try something similar with our tiles! This game will require two players.

Player 1 receives a set of tiles in colour and player 2 receives a set of tiles in black and white, to mark the difference. Flip a coin to decide who will start first. The goal is for each player to create the longest path on the grid.

You can only align the tiles of your own colour. You cannot form a path using your opponent's tiles.

### Tip:

At the end of the game, measure the length of both winning and losing paths.

## How many geometric shapes can you replicate?

Can you replicate the following shapes by using the tiles at your disposal?



### Tip:

Can you calculate the area and the perimeter of those shapes?

## Do you want to finish with an a-maze-ing activity?

This activity is using the concept of the “Block maze”, a maze design in which the solver creates a path by moving X number of blocks on a grid to reach the goal<sup>1</sup>.

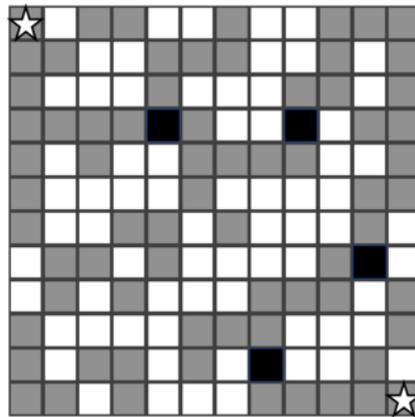


Image source: [https://commons.wikimedia.org/wiki/File:Maze\\_Types\\_Solution.PNG](https://commons.wikimedia.org/wiki/File:Maze_Types_Solution.PNG)

All the tiles are placed on the grid in a way that they do not form a path from start to finish. You have to move a certain number of times to form a path that connects the starting point and the finish point.

<sup>1</sup> <https://www.doyoumaze.com/blog/how-to-make-a-block-move-maze>