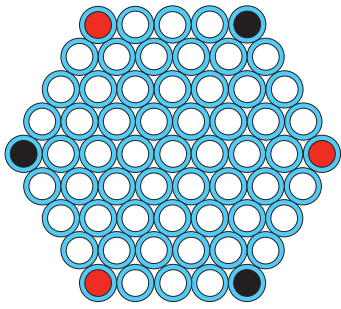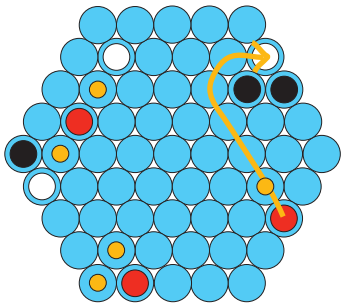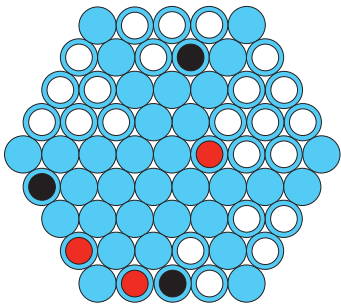# ICEBREAKER
by Mark Steere



**Fig. 1 - Initial setup.**

Any size board can be used.



**Fig. 2 - Red's moves.**

The orange dots mark Red's available moves.



**Fig. 3 - Game in progress.**

## INTRODUCTION

Icebreaker is a two player game played on a hexagonal grid. There are three red ships and three black ships, initially placed as shown in Figure 1. The remainder of the cells contain white icebergs. The two players, Red and Black, take turns moving one of their own ships, one move per turn, starting with Red. Players are not allowed to pass. Mark Steere designed Icebreaker in November, 2021.

## MOVES

You must move one of your ships to an adjacent cell which doesn't contain another ship. By moving to a cell containing an iceberg, you capture the iceberg, and your score increases by 1.

## MOVE DIRECTION

You must select one of your ships to move, and move it closer to its closest iceberg. Distance is measured by the number of cells between ship and iceberg along the shortest path of cells that connects them, going around other ships. If the ship you've chosen to move has icebergs adjacent to it, you must capture one of them.

In Figure 2, the orange line marks the shortest path between a red ship and an iceberg. If Red chooses to move this ship, he must move it along this path, one cell closer to the iceberg.

The red ship in the bottom row has a number of shortest paths (of equal length) leading to its nearest iceberg. So here, Red has two possible moves bringing it closer to the iceberg.

The red ship in the upper left has two equally distant, nearest icebergs, and may move toward either of them.

Figure 3 shows an actual game in progress.

## OBJECT OF THE GAME

The goal is to capture the majority of the icebergs. On the size 5 board shown in the figures, there are 55 icebergs starting out. If you capture 28 of them, you win.