

REDSTONE

by Mark Steere

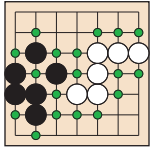


Fig. 1 - Four groups, 18 liberties.

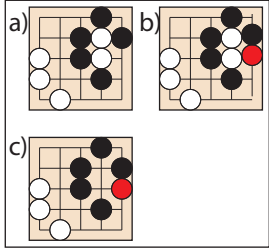


Fig. 2 - Black captures white group.

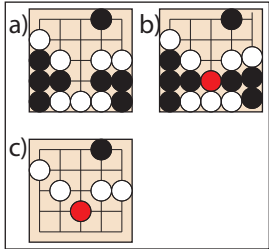


Fig. 3 - White captures one white group and two black groups.

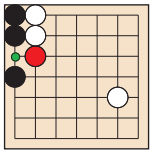


Fig. 4 - Black can play black on green (no capture), or red on green (self capture).

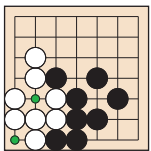


Fig. 5 - Black can't place a stone on either green spot.

INTRODUCTION Redstone is a variation of Go in which red stones are used to capture. Red stones are permanent. They cannot themselves be captured. “Adjacent” will mean orthogonally (horizontally or vertically) adjacent here.

The two players, Black and White, each have unlimited stones of their own color. They also share an unlimited supply of red stones. Draws cannot occur in Redstone. Mark Steere designed Redstone in February, 2012.

Luis Bolaños Mures made a material contribution to the design of Redstone.

OBJECT OF THE GAME You must annihilate your opponent, removing all of his stones from the board. If your placement eliminates all black and white stones from the board, you win. If your placement eliminates all of your own stones while enemy stones remain on the board, you lose.

PLAY Starting with Black, the two players take turns placing stones onto unoccupied points on the board, subject to restrictions, one stone per turn.

NO PASSING Passing is not allowed in Redstone. Players will always have a placement available and must make one.

GROUPS AND LIBERTIES A group is an orthogonally interconnected collection of one or more like-colored stones. Only black groups and white groups will be discussed here, not red groups. A liberty is an unoccupied point adjacent to a (black or white) group. In **Figure 1**, the liberties are marked with green spots.

CAPTURES A capturing placement results in one or more groups, of either or both colors, having no liberties. Such a placement can only be made with a red stone. Conversely, a red stone can only be placed if it bounds (completely deprives of liberties) one or more groups of either or both colors. Red stones are permanent. They cannot themselves be captured. In **Figure 2**, Black captures a white group with a red stone. Self capture is allowed.

When multiple groups without liberties result from a placement, all such groups are removed immediately following said placement, regardless of the groups' colors. **Unlike Go**, if you unbound your own temporarily bounded group by removing a neighboring enemy group, you must still remove your own temporarily bounded group. In **Figure 3**, White captures one white group and two black groups.

In **Figure 4**, Black could claim the green point with a red stone, capturing his own, upper group, or with a black stone, joining his two groups without capturing anything.

In **Figure 5**, Black is not allowed to place a stone of any color on either of the two liberties marked with green spots. Why not? Because a black stone on either of the green spots would itself be a bounded group, and only a red stone can be played if a group will be bounded. But a red stone can only be played if it bounds at least one group, and no groups would be bounded by a red stone on a green spot. Black can place a black stone on any other unoccupied point. He can't place a red stone anywhere.

PIE RULE Since Redstone is a game of annihilation, not of point score, Go's komi can't be used. Instead, Redstone uses the pie rule for balance.

AUTHOR'S NOTE Feel free to publish this rule sheet, and to program the game of Redstone for online or offline play. There is no licensing fee, and no royalties are expected. However please don't change the name or the rules, and please attribute the game to me, Mark Steere. My other games can be found at marksteeregames.com.