

# The game of Go

Go is an ancient board game for two players in which the aim is to capture more territory than the opponent.

## Equipment

**Stones:** At the beginning of the game, one player (normally chosen randomly) takes the set of black stones, while the other takes the set of white stones.

**Goban:** The board is normally a 19x19 grid. It starts empty and during the game, players take turns adding their stones on the unoccupied intersections of the grid. For a quicker game, a smaller board (13x13 or 9x9) can be used.



## Concepts

**Group:** Stones of the same colour connected orthogonally form a group; they function as a single unit. See figure 1.

**Liberties:** The adjacent unoccupied intersections of a group are called its liberties. A group must have at least one liberty to remain on the board. See figure 1.

**Capture:** When a player adds a stone that removes the last liberty of an opponent group, the player captures the group, removes the captured stones from the board, and keeps them as prisoners. See figure 2.

**Suicide:** You cannot add a stone to the board that has no liberties or would remove the last liberty of your own group. Exception: You can add a stone with a lack of liberty if it captures enemy group(s) and creates liberty(ies) for itself. See figure 2.

**Ko:** A player may not repeat a previous board position. See figure 2.

**Alive/Dead/Unsettled:** A group that cannot be captured by the opponent is called alive (for example, a group that controls 2 separated territories (called Eyes) cannot be captured). A group that can never become alive is called dead. A group that cannot be proven dead or alive is called unsettled. See figure 3.

**Territory:** An unoccupied intersection controlled by a player is called a territory. A player controls a region of territories if that region is fully encircled by its own living groups and it cannot be successfully challenged (reduced, captured, invaded, etc) by the opponent. See figure 4.

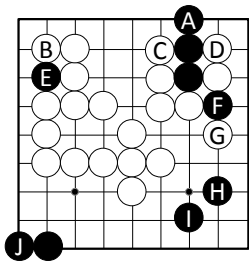


Figure 1. There are 10 **groups** on the board labelled A to J.

Note that a single stone is considered a group of one.

Note that the diagonal does not connect stones (ex: H and I).

Note that all groups have at least 1 liberty.

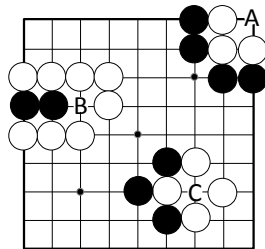


Figure 2. When black plays at A, the white group in the corner will be **captured**; this will create liberties for the stone at A.

Black cannot play at B; it is the only liberty of that group and it would be a **suicide**.

When black plays at C, the white stone on its left is captured. This also creates a **ko**; white cannot capture the black stone at C right away.

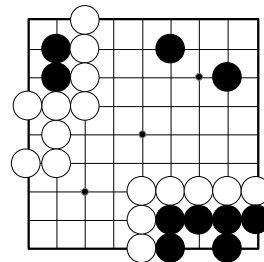


Figure 3. The black group in the top left corner is **dead**; it is completely surrounded by a living white group and has no way to expand or fight its way out.

The black group in the bottom right corner is **alive**; it has 2 eyes and can never be captured.

The 2 stones in the top right corner are **unsettled**.

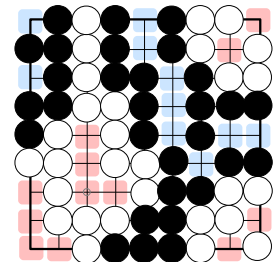


Figure 4. This is an example of a finished game. All spaces of the board have been surrounded and secured by black or white stones. Black controls 10 territories, and white controls 12.

## Game flow

Starting with black, players alternate and either add one of their stones to the board, pass or resign. The game ends when both players pass and agree that the board cannot progress any longer, or one player resigns giving the victory to the other player.

## End game scoring

All dead groups are automatically captured by the opponent player and removed from the board. Black player's score is the number of territories that player controls plus the number of white stones captured. White player's score is the number of territories that player controls, plus the number of black stones captured, and plus the **komi** value (to offset the disadvantage of playing second, the white player is given a compensating amount of points, usually between 5.5 and 7.5. This amount must be agreed before the start of the game). Whoever has the highest score is the winner!

**Instructions:** Read the rules on the other side of this sheet. Find small items that can be used as stones (coins, buttons, beads, cardboard tokens, etc); you will need around 30~40 for each colour. And now you are ready to play on this 9x9 board!

