

# About the game of Go

Go is the oldest board game in the world. People, including children, have enjoyed playing it for at least 4000 years, and it is still popular today. In China it is called Wei-chi, in Korea, Baduk, and in Japan, Go or Igo. Because of its continued popularity in Asia, there could be as many Go players as Chess players in the world today, yet only in recent years has it become better known in the United States. (See [https://en.wikipedia.org/wiki/Hikaru\\_no\\_Go](https://en.wikipedia.org/wiki/Hikaru_no_Go))

Early European immigrants brought chess with them, while Go did not arrive until the turn of the 20th century when Asian immigrants began to come to America. Only after World War II did Go filter out of the Asian-American communities. Most Americans have simply not yet seen or heard about Go.

## How do Go and Chess Compare?

Chess is played in almost every school. City and state competitions are common, along with dozens of national tournaments. According to the 80,000 member United States Chess Federation, there are at least one million regular or serious players in the U.S. The American Go Association has about 2500 members and one national tournament, with about 400 participants. The game is just beginning to appear in after-school programs around the country.

Computer programs now play Chess at world-class levels, while programs for Go are still at mid-amateur levels. One reason for this difference is that the number of possible Go games is far larger than the number of atoms in the universe, making the programmer's task resemble an art project. The other factor is Go's relatively simpler rules and larger board. While Chess is played on an 8 x 8 grid, Go is normally played on a board that has 19 horizontal lines crossed by 19 vertical lines, forming 361 intersections. For beginners, a board that is 9 x 9, or even smaller, is much more manageable, but even that size is orders of magnitude more complicated than Chess.

Chess is part of the school curriculum in about 30 countries. The benefits to children include their development of analytical, synthetic and decision-making skills that they can use in real life. When they play Chess they must call upon higher-order thinking skills, analyze actions and consequences, and

visualize future possibilities. It also helps them gain insights into the nature of competition. All of these benefits equally apply to Go.

The playing pieces in Chess are part of a hierarchy, culminating with the king. Any other piece may be sacrificed in order to maintain the king's position. A game ends when the king is dead. The strategy of the game models a military battle, a small-scale war. The direct message is that some pieces are more important than others; the implied message is that some people are inherently more important than others. As a Chess game progresses, the board becomes simpler.

In Go, all of the pieces are of equal value which conveys the importance the individual. In Go, once a piece is placed on the board it does not move for the remainder of the game (though it can be captured.) As the game develops, the played pieces, called stones, acquire strength or weakness due to nearby stones. The player's main task is to build safe groups. The concept of hierarchy is entirely absent. The ultimate goal of capturing the king is replaced by building alliances, surrounding territory, and limiting the expansion of the opponent's stones. This creates radical differences in strategy. And as a game develops and the board fills with stones, the game becomes more complicated.

Chess has been played long enough to catalog all of the standard openings and main variations. The Oxford Companion to Chess lists 1,327 of them. There are about 40 moves in an average game. Go has no standard openings beyond the first three or four moves, and in a normal game on a 19 x 19 board, there are between 200 and 250 moves.

However the most obvious difference between Chess and Go is at the start of play: in Go the board is empty, and a player is free to play on any intersection on the board; in Chess all the pieces are pre-arranged, and there are only eighteen possible first moves.

Every Go game is unique. After the first few moves, there are no safe opening strategies. Playing the game of Go involves thinking, visualizing, feeling, timing, and ultimately, detachment. In Japan, an alternate name for Go is Hand Talk, showing that it resembles a conversation. In many instances, psychology also becomes as important as skill. A player needs to grasp the balance point between safety and risk. During each turn something is gained. The goal is to gain a slight advantage with each exchange. If your moves are too slow or cautious, you may be safe, but by the middle of the game, you will be

losing. And if you simply try to prevent your opponent from gaining anything, your own position usually becomes too scattered and weak. The ultimate goal is to maintain a sense of moderation, respecting rather than trying to crush your opponent.

In terms of teaching a player to look to the future, Go and Chess are comparable, but there is a third very significant difference. In Chess, the better player or strategy wins. Go's traditional handicapping system ensures that every amateur player loses about half of their games. With the proper handicap, both players have an equal chance of winning, even in tournament play. As a result, players often become less attached to winning individual games, and instead become interested in learning more and improving their rating. For children (or their parents) overly concerned with victory, Go is a compelling antidote. And in Go, the game ends when both players pass; it ends by agreement.

## How to begin thinking about how to play

The rules of the game are very simple, and children as young as five can grasp them. In Asia, it is common for young children to play the game. Learning to master Go is a different question entirely, and many people miss this distinction. "If it's that difficult to play really well, it must also be very difficult to learn at all." Not true!

When a stone is placed on the board it does not change position for the rest of the game. **The primary rule of play is that as long as a stone touches (is adjacent to along a line) at least one empty intersection it can stay on the board, and only if the opponent fills in every adjacent intersection is it captured and removed from the board.** If you commit this idea to memory, you can figure out the answer to almost any question that arises during actual play.

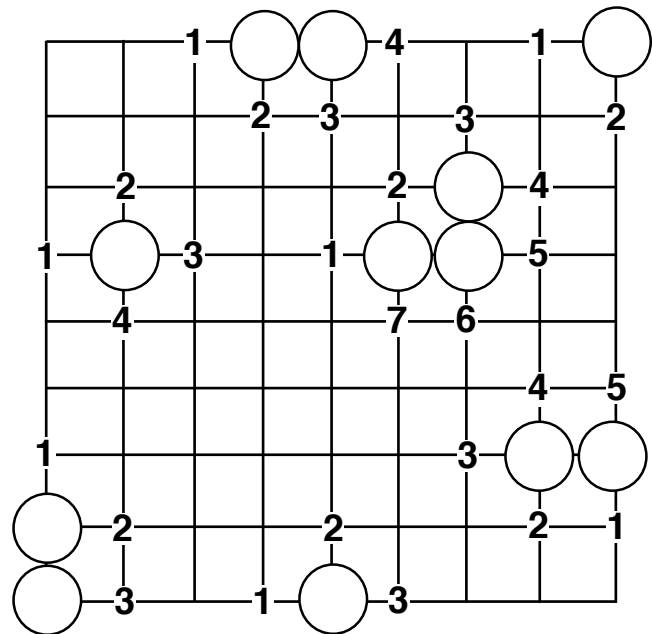
Go is usually referred to as a territory game. Territory is defined as an empty intersection within a group of stones of the same color. A captured stone is worth a point, so trying to capture and avoiding capture are important aspects of the game. But gaining territory is usually a consequence of many smaller encounters around the board. In this sense, territory is often a by-product of stones having been captured.

## Definitions and conventions

1. The game is for two people, or two teams, playing alternate moves.
2. The board is composed of an odd number of lines, with 9 x 9 being a common small size, and 19 x 19 being the largest used today.
3. The playing pieces are called stones, and they can be placed on any empty intersection of the lines. Black always goes first.
4. Once placed, stones do not move for the remainder of the game, unless they are captured.

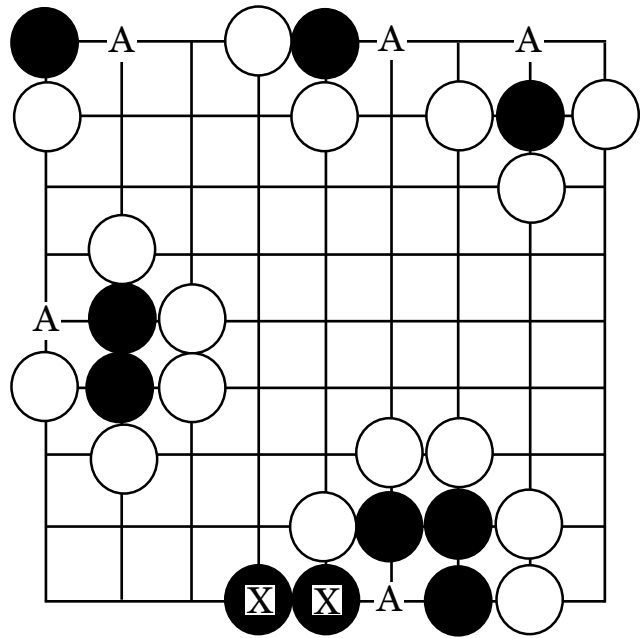
5. The primary rule for play is that a stone or group of stones stays on the board as long as it touches at least one empty intersection. When the opponent fills the final intersection (or empty point) around a stone or group of stones, it or they, are captured and removed from the board.

This diagram shows the number of intersections that touch single stones, or groups of stones.



6. A group can have any number of stones. For example, a two-stone group in the center of the board would touch six empty points, a two-stone group on the edge of the board would touch either four or five empty points depending on its orientation.

In this diagram, each of the black stones or groups of stones have one empty intersection remaining, except for the two stones marked with “X.” If white plays at any of the points marked “A,” those black stones would be captured and removed from the board.



7. Placing a stone on the board when that stone or the group it joins has zero empty points touching it is an illegal move. In Go, that is the definition of suicide. However, if the played stone captures one or more of the opponent’s stones as it is played, the player’s move ends after the player removes those captured stones from the board. Then, the player’s stone will have at least one adjacent empty point.

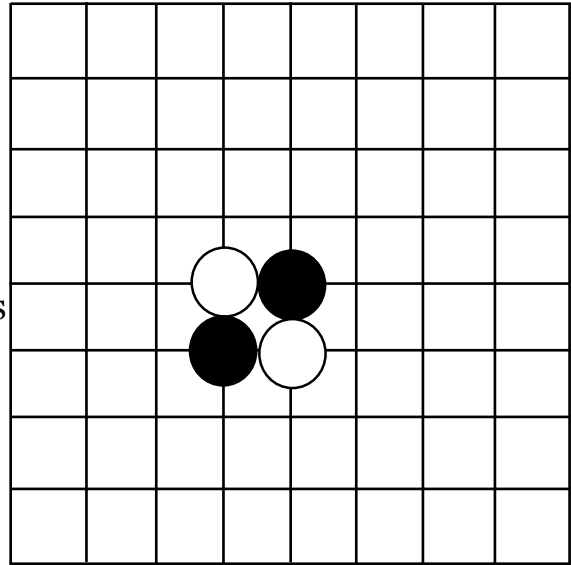
8. The game ends when both players pass.

## Learning to play on a 9 x 9 board

The simplest approach, for any age player, is to end the game with the first capture on a 9 x 9 board.

If black moves first on one side of the board, and white plays on the other side, this would often result in nothing being captured at all for the entire game. Both players could safely connect their stones and avoid contact with their opponent. Then when the game ended in a tie, with neither capturing any stones, both could feel that they had succeeded. And in a sense that would be true, but they would have learned very little.

To avoid this, the best initial formation is shown in this diagram. This puts both players at risk from the first moves, and normally leads to complications that result in captures. A typical game using this starting position may only take a few minutes. The first move is always an advantage. Since black goes first, the players can alternate.



If after a while, one player begins winning more than half the time, that player should play white in several consecutive games. If the winning streak ends, the players would then alternate colors. If the winning streak still continues, the players can discuss strategy.

Another way to equalize the competition is to have the person who is winning play faster, and allow the opponent slightly more time for each move.

Regardless of outcome, beginners can benefit from playing this version hundreds of times with as many different opponents as possible.

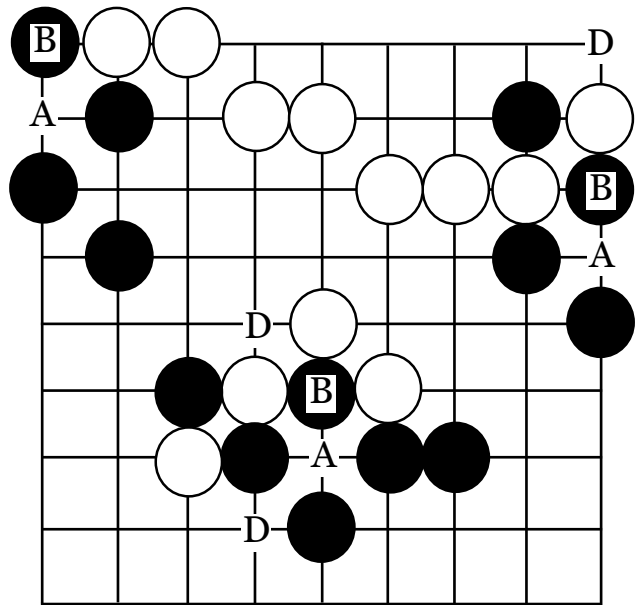
## Next step

When a player has learned to generally avoid having her or his stones captured in simple situations, the player is ready to move to the next step, which is to end the game with the capture of a total of five or more stones.

This is really a large jump, for it means that it will be possible for one player to sacrifice a few stones in order to capture a larger number from the opponent.

It also introduces an additional rule, called Ko in Japanese, that prevents repetition of the same board position. (See diagram on the next page.) The rule states that when a single stone is captured, the opponent must make the next move someplace else on the board, rather than recapturing the same stone (as this could go on forever).

For instance, if black at point B had just captured a single white stone at point A, white's next move may not recapture at point A, but must be made anyplace else. If black answers that move, then on the following move, white may capture the single stone again, and then black must find a move elsewhere. If black does not choose to reply to white's forced move away from the ko, black may either fill the Ko, or capture at point D to end the Ko.



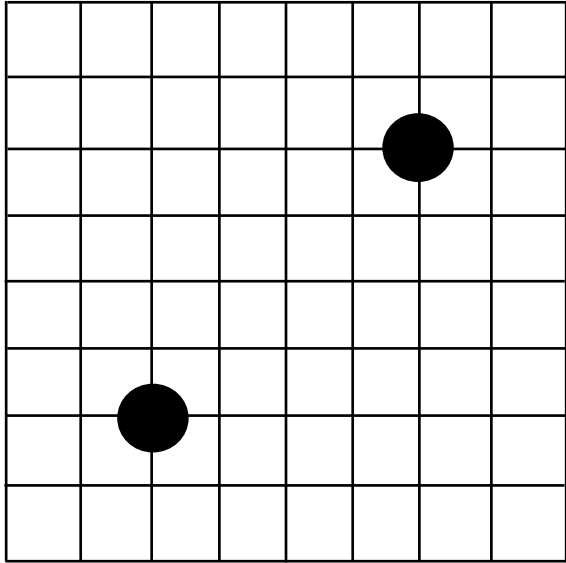
During the process of playing many games on a small board, territory naturally appears to the players, even while it does not determine winning or losing. Directly teaching territory is seldom necessary.

Territory counting is concerned with the number of points or intersections that each player controls. At the end of the game, there are often many neutral points that do not affect the score, and they can be filled in turn by both players. After that, every remaining empty point belongs to one of the players. Whoever has the larger number wins.

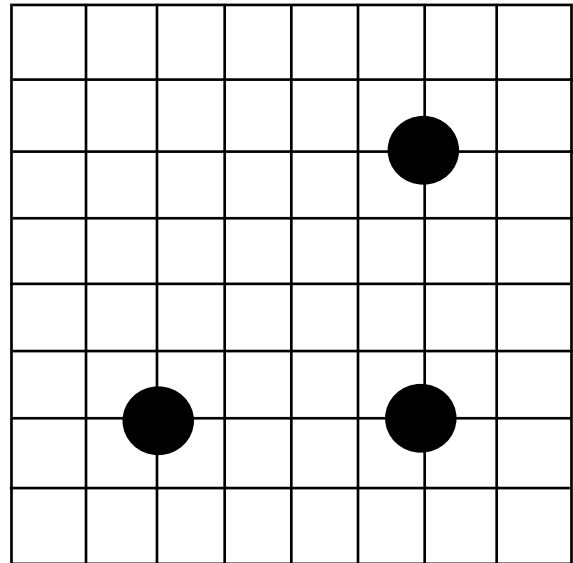
Once players have learned how to avoid having their stones captured, they can benefit by playing for territory.

At this point, a more standard handicapping system may be used, still on a 9 x 9 board. (See Diagrams on the next page.) After the handicap stones are placed on the board, white plays the next move.

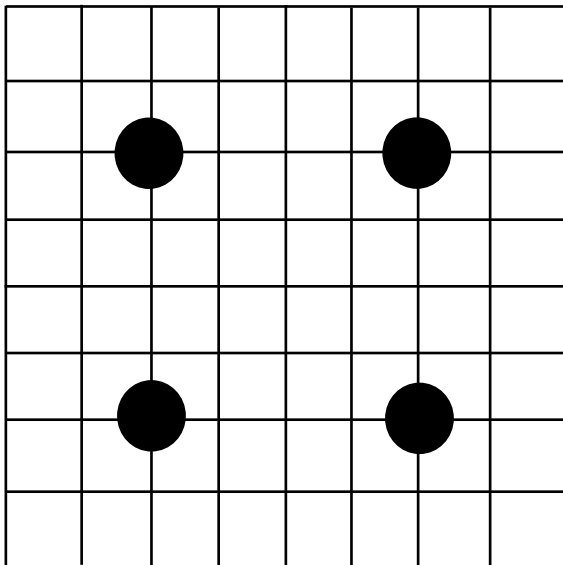
The final diagram is for a first capture game. Black plays first.



Two-stone handicap

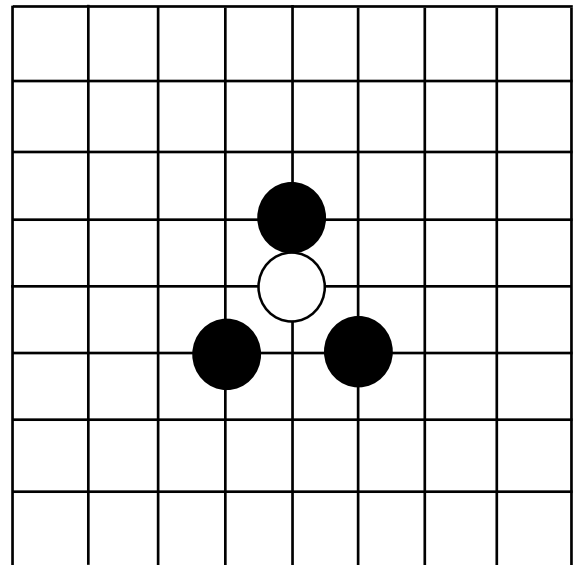


Three-stone handicap



Four-stone handicap

This is the largest  
handicap used on a  
9 x 9 board.



Use this arrangement  
when an experienced  
player is matched  
against a beginner in  
the capture game.