**Go Skills Guide A: Lessons A01-A12**

These guides are just suggestions of how to teach these topics, there will be other ways and some may be better. Also, the order of lessons is also just a suggestion. Some topics are more basic, and some depend on others, but in practice it’s good to look at the games played by the pupils in the class and this will often suggest what they most need to learn next, or what they need to revisit.

Any particular teaching session should include the chance to play games and/or do other activities (e.g. practicing invading in a small space) as well as doing some puzzles together. The actual teaching part should be short and as interactive as possible.

Once you have got to the end of A05 the children can play atari-go and any time after the end of A07 they can move on to playing a real game on a small board, but they are likely to need help with scoring for quite a while. It is good to get to the end of A05 in one or two sessions if possible but not if it takes longer for children to understand.

Many topics will need revisiting or reinforcing later, so this needs to be built into any teaching plan. It’s good to have many sets of puzzles on each topic, so that you can practise them again at intervals. Most topics have some puzzle sets here but if there are not enough puzzles in this curriculum, some other good sources are:

* The GoMagic skills tree
* The 4 volumes of “Graded Go Problems for Beginners” by Kano
* The Korean 1612 Go problems book

Note: In the UK we play with AGA rules, which use pass stones and territory counting. So this guide is written on that basis and we don’t refer here to area counting. Children who learned Go somewhere else may not be familiar with pass stones and children from China may already use area counting; so you will need to explain the different way that we end the game and score here.

**A01: Capturing single stones**

Before starting this topic, it’s suggested to give a basic introduction to the idea of Go:

* Say that Go is a game of territory, if possible show an end of game position
* You could say that the board is like an empty land or island that both players will try to take over
* Explain how the game starts and how to make moves (e.g. that stones don’t move once placed)
* Show the first few moves of a game

Explaining capturing:

* Show a white stone & the 4 empty spaces next to it (liberties), like pockets of air that it can breathe
* If using a magnetic demonstration board, you can use fridge magnet numbers to show the liberties
* Say these are only in the four directions of the lines of the board, there are no diagonals in Go
* Say that black doesn’t normally get 4 moves in a row but we are going to demonstrate capturing
* Get the children to come up one by one and put stones on the board to capture the stone
* Do the same in the corner and side, see if they can work out how many stones are needed

At this point you could do some puzzles where there is one stone that can be captured in one move. At this stage it’s best to avoid examples where the stone placed has no liberties until the captured one is removed.

This is probably not long enough for a whole lesson!

**A02: Chains of stones and liberties**

Introduce the concept of stones being connected and working together:

* Go back to the situation where a white stone has only one liberty left
* Ask if my stone is saying “help, save me!”, then, how can I rescue it?
* When someone shows the right move, give positive feedback
* Explain that stones connected along the lines of the board work together and are stronger
* See if they can work out how many more moves black needs now to take the 2 stones
* Ask what will happen if white instead played elsewhere e.g. diagonally from the threatened stone
* Show a lot of stones connected together and ask how easy it would be to capture them
* It can be useful to call a solidly collected set a “chain” of stones as “group” is used more widely
* See if they can identify stones that are connected in chains and stones that are not

At this point they could do some puzzles identifying separate chains of stones, and ones where you count the liberties of a single stone or chain of stones.

**A03: Capturing groups of stones**

Show various examples where a group of stones can be captured in one move.

Do some 9x9 whole board puzzles where you have to find the stones you can capture in one move; there are puzzles like this on GoMagic.

From this point on it can be good to sometimes start sessions with a few capturing puzzles as it helps to practice capturing and it means you will start with something that hopefully everyone can do and understand.

In the early stages of learning Go, it’s good just to get a lot of practice at capturing stones before trying to move on to more advanced concepts.

**A04: Atari, self-atari, get out of atari**

Explain the word “atari”. Show some examples of atari, getting out of atari, moves which accidentally put the player’s own stones in atari.

Do some puzzles on these topics

**A05: Self-capture rule**

Prepare the students that this topic will be more challenging. You could say: “This is the most difficult concept in learning to play Go. Once you have understood this, the rest is much easier”.

Explain that you are not allowed to make your own stones get captured. If your pupils play chess, you can say this is the same as not being allowed to put your own king in check in chess.

[It is possible to also mention at this point that there is one other type of illegal move: repeating the same position, but that you will explain it later]

Show some examples of illegal moves, including playing in a single surrounded space, or an illegal move which tries to add to a surrounded chain of stones with only one liberty.

Now explain that the only time you can play in such a place is when you are actually making a capture. Show some examples. In this case both players temporarily have no liberties, explain that in this case the rule says that the person making the move captures the other, their own stones stay on the board.

Do some puzzles which show illegal moves and similar moves which are legal.

The children should now know everything they need in order to play a game of atari-Go (say, first to capture 5 stones wins). If a ko arises when they do this, you can take that as an opportunity to explain the ko rule if you wish. If some children continue to play their game until the territory is all decided, you can use that as an opportunity to explain the scoring at the end of a full game of Go, but it’s less likely that the children will be ready for this at this point

It’s good to get the children to watch out for atari in these games, and maybe say “atari”. You could have a competition to see who can spot the most ataris in a game.

**A06: Ko rule**

Explain that it’s not allowed to repeat the same position as after your last move. If this has already happened in some atari-Go game, then one of the children may be able to show the position themselves. But it’s more likely you will need to show it.

Show how, if there was no ko rule, the capturing could continue back and forwards forever. Some children find this quite amusing! Explain that the rule says you can’t repeat the same position straight away, you have to play somewhere else.

You can also explain that when the second player plays somewhere else, the first player can then finish the ko by connecting it. But if they don’t, then it’s possible now for the other player to take back.

Show some similar positions which are not ko (where more than one stone is being captured by one of the players) and explain that taking back straight away is fine in this case.

Do some basic ko puzzles, including some that show similar positions which are not ko.

Ask the children to show you when ko positions occur in their games. You could see who can spot the most.

It is likely that the self-capture rule and ko rule will need reinforcing quite a bit during the next few lessons.

**A07: Counting the score**

Show a position from the end of a 9x9 game, with some captured stones. At the moment it’s simpler if there are no dead stones on the board, or neutral points. Explain how to count the territory and add on the number of captured stones. It’s best to show an example with a few small territories, no very big numbers to count. One child could count each territory and others could add on the number of captures.

You could show that the safest way to count an area is to go along each row in turn so that no points are missed or double counted.

Later you can show that it’s easier to count by using the captured stones to fill in some of the other person’s territory. And also to show that territories can be counted more easily by rearranging them into rectangles. But it’s too early to show that now. Rearranging stones within territories can be difficult because of the need to make sure that the boundaries between territories are not disturbed.

Any time from this point onwards children can start to move on from atari-Go to scoring territories. But there is no need to rush this if they are still enjoying playing atari-Go.

It is very important to ask children at first to let you know when a game is finished and to give them any help they need in scoring the game. Otherwise they can get into habits of scoring incorrectly or stopping games when they are not in any way complete.

**A08: Two eyes**

Show a group of stones that is just a solid lump, with no internal spaces (e.g. a square of 3x3 stones in a corner). Ask if the children think this is a good group to make. Get them to show how few stones are needed to capture it.

You can ask them how the group could be made stronger. Next move on to a group of stones with one eye inside. Ask why it is more difficult to capture. You can demonstrate / they can help to show that at first the attacking player has to fill the external liberties and can only play in the eye once this is done. But the group does get captured in the end.

Now you could ask if there is a way to make the group even stronger. Someone may come up with the idea of two eyes. If not, you can show it. Ask them if it can be captured. You can help them to understand it. If the attacking player tries to play in an eye, their own stone has no liberties/air; but the group they are attacking still has one in the other eye. As it’s not possible to play two moves at once, the group can never be captured. You can explain that if the player with the two-eyed group mistakenly fills in an eye themself then of course then the group can be taken.

You could mention that if the group is not all connected then it may not really have two eyes. But there’s no need to go into detail yet, as this is in lesson A10. However, if the situation comes up in a game then that’s an opportunity to discuss/explain it.

We have had a lot of success in explaining eyes by calling the zero/one/two-eyed groups the “house of straw”, “house of sticks” and “house of bricks” respectively, as in the story of the “Three Little Pigs”. The analogy works quite well because in the story the first two houses both get destroyed and only the third one is safe.

Practice this topic with some puzzles and ask the children to watch out in their games for groups with zero, one and two or more eyes. Going forward from this point it’s really great if they can get a feel of which groups are so strong that they could easily make two eyes if they need to.

**A09: Cutting and Connecting**

Show some examples of shapes that can and can’t be cut, if possible ask the children to work out if they can be cut or not:

* The diagonal connection can’t normally be cut
* The one space jump in the centre can be cut
* The knight’s move depends on a ladder
* The bamboo joint can’t be cut
* The “half bamboo joint” where one stone is missing can’t normally be cut either
* The two point jump on the third line can’t normally be cut
* The connection on the first line between two second line stones can’t normally be cut

Do some puzzles to practice cutting and connecting. Ask the children to show you in their games when there are key moves involving cutting or connecting.

**A10: Real and False Eyes**

Show examples of real and false eyes. See if the children can work out for themselves what the problem is with a group with one real eye and one false one.

Note that in the centre of the board you only need to get three of the four “corner” points of the eye in order for the eye to be real.

One situation that can be confusing is a group which has two separate chains/components, but they are both next to both eyes, so the eyes are real even though the group is not all firmly connected. You can demonstrate this if necessary with just 6 stones in the corner surrounding eyes on the 1-1 and 2-2 points.

Do some puzzles to practise this, including ones where a group is killed by making an eye false. Ask the children to show you in their games when a situation occurs where an eye is made false.

**A11: Pass stones, neutral points, dead stones**

Show a position very near the end of a game and help the children to show you how the game should end. You could use more than one example to show things such as:

* One or more neutral points that need to be filled in
* Dead stones that need dealing with (it is best if they are very obviously dead)
* One-point kos that need to be resolved

Explain that at the end of the game both players must pass, giving each other a pass stone. If the second one is black then white must pass again as white must always pass last (so that both players have had the same number of turns). Only then is the game over

Make sure that you count the score at the end of this example.

Children (and adults!) may be confused by pass stones. They may think that they are losing something by passing instead of making a different move, or they may want to pass when the game is not finished. They may not understand why they don’t lose something by agreeing that some of their stones are dead. You could show the end of the game where:

* First there are some moves worth one point, where one player surrounds one extra space or stops the opponent from doing so
* Then there are neutral points worth zero, that is they make no difference to the score
* After this either passing, or playing in the opponent’s territory (effectively giving them an extra captured stone) or filling in a point of your own territory are all the same, as they all effectively lose one point. So not passing at this point doesn’t gain anything, it just extends the game without changing the score

If children want to pass when the game is not really over, it should be possible to help them discover the problem for themselves by asking how we will decide who the territory belongs to in any unfinished areas.

If in a real game both players have passed but then can’t agree on the territories or which stones are dead then the game should be restarted until these are clarified. This is an important point to explain.

The concept of the end of the game is not easy so all this teaching will need to be reinforced by helping the children at the end of the game until they are confident; and probably doing some more puzzles/examples together. This is one of the most important sections in Level A of the curriculum as having the ability to correctly count the game together increases confidence and the sense of agreeing a fair result at the end of the game.

From this point on it’s definitely good to move on from atari-Go so that there’s more opportunity to count up at the end of games.

**A12: One big eye, Nakade shapes**

Show a lot of examples of small groups with one large eye inside that are either alive or dead or unsettled. Start from the very simplest ones with a 2 or 3 space eye and move up to ones that have a 6 or 7 space eye. The children may be able to work out the difference between the ones which are dead or alive as they stand and the ones where it depends who plays first. Stress that it is only the ones where it depends who plays first that are urgent to play, and for at least one example count how many points difference it makes so they can see its importance. It is vital to do this as sometimes children worry that if some of their stones are captured when reducing a nakade shape that they will somehow make a net loss; but a worked out example will show that this is not the case.

You could include some cases where it is different in the corner e.g. the 3x2 rectangle with no liberties. But it’s best not to have examples with ko fights, and there should be no need to explain seki yet unless it occurs in a game.

It can be good to give each of the children a chart of the nakade shapes to take home and keep.

**Revision of level A**

When revising/reinforcing the Level A ideas,we suggest watching this video on common mistakes by novices, from the New York Institute of Go: https://www.youtube.com/watch?v=Or4mXlDtBa4