

Learning with Abel – at home

Whether you are an existing ringer or a new ringer, these notes set out a learning plan and explain how to use simulator software at home to practise your listening skills and develop your ‘ropesight’, by pressing the ‘J’ key on the keyboard..

ART’s approach in ‘Learning the Ropes’ is to break down what is a complicated activity into a series of skills and practicing each skill in small manageable steps, before gradually putting them together. This avoids brain overload. Few people are able to multi-task!

People learn through repetition. Each skill needs immense concentration at first, then less concentration is required each time the activity is repeated, till eventually the action becomes automatic. The brain is then freed up to concentrate on other things.

Of course, it is important that you practice doing things correctly. Don’t let bad habits creep in as it will then take a lot longer to un-learn them. Practise alone does not make perfect. Only perfect practise makes perfect!

To plain hunt a bell or ring it to a method, you need to acquire the following skills.

- To control your bell and make it ring steadily in the same place.
- To be able to pick out the sound of your bell and distinguish it from the others.
- To be able to leave an open-handstroke lead
- To be able to handle your bell sufficiently well at handstroke and backstroke to make it move up or down one place.
- To be able to count your place and know which place you are ringing in
- To understand the theory of plain hunting, or blue line of the method that you are ringing
- To pick out which rope you should be following next.

Using simulator software at home can help you develop some of these skills, and speed up what you learn in the tower..

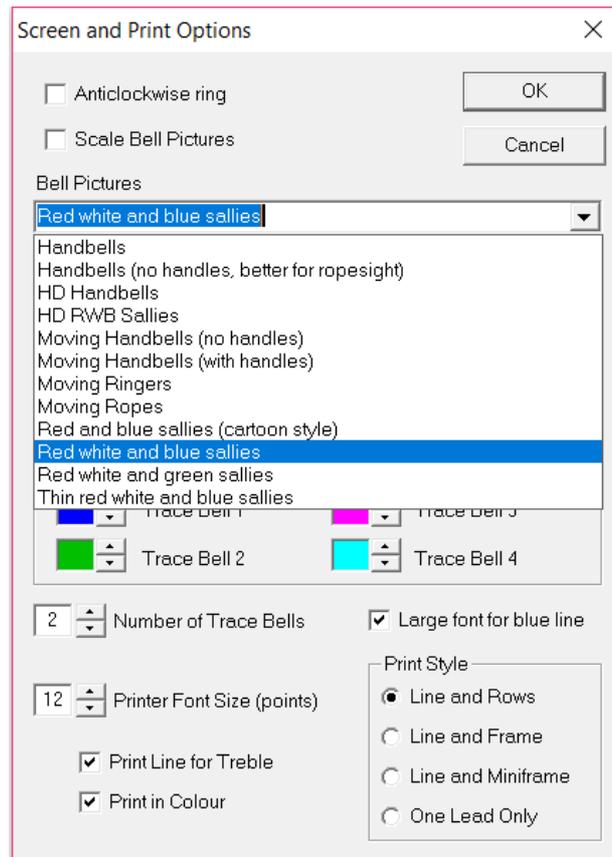
If you are an experienced ringer, ringing with a simulator, and especially by ear, is different to ringing with real ringers, who often adjust to fit round you. Therefore rather than try anything too complex, it is sensible to start with some basic exercises, as set out in this booklet.

Whilst what has been written in this booklet explains how to use Abel, the same principles apply to Beltower and Virtual Belfry, and similar notes are available for those applications.

The screen options

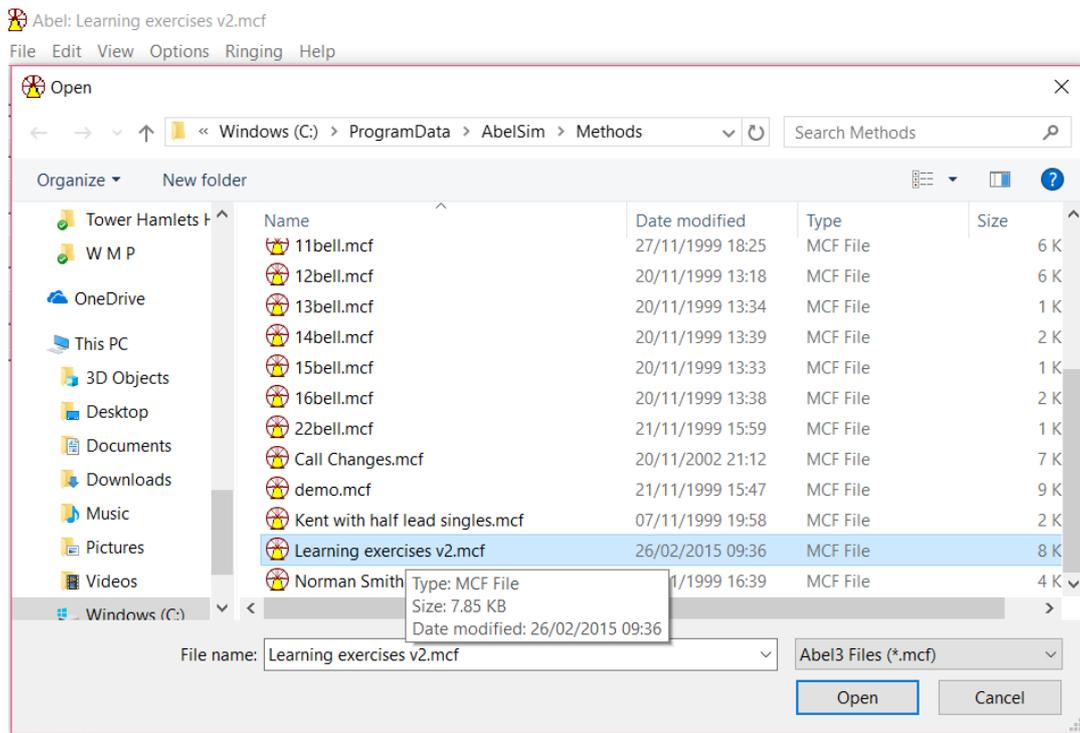
The first thing you will need to do is set the screen option.

Whilst Abel has video clips of real ringers, because of the time delay between pulling on the rope and the bell sounding, we recommend that for home use you set the red/white blue sallies option in the Bell Pictures box in the 'Options' ⇒ 'Screen and Print Options' menu.



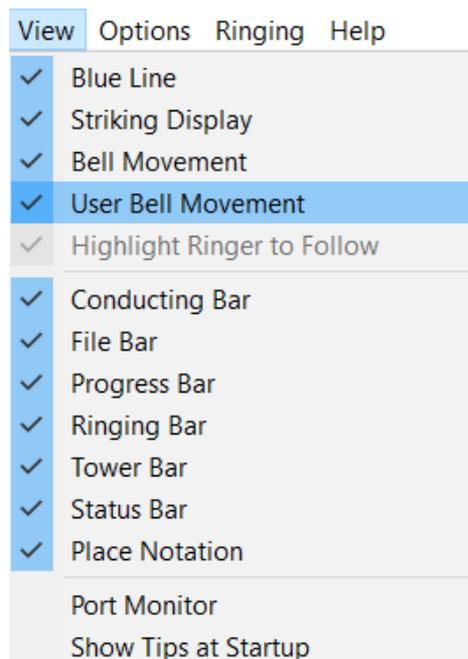
Screen and Print Options window

Then go to the 'File' ⇨ 'Open' menu and scroll down to the 'Learning exercises' file and click open.

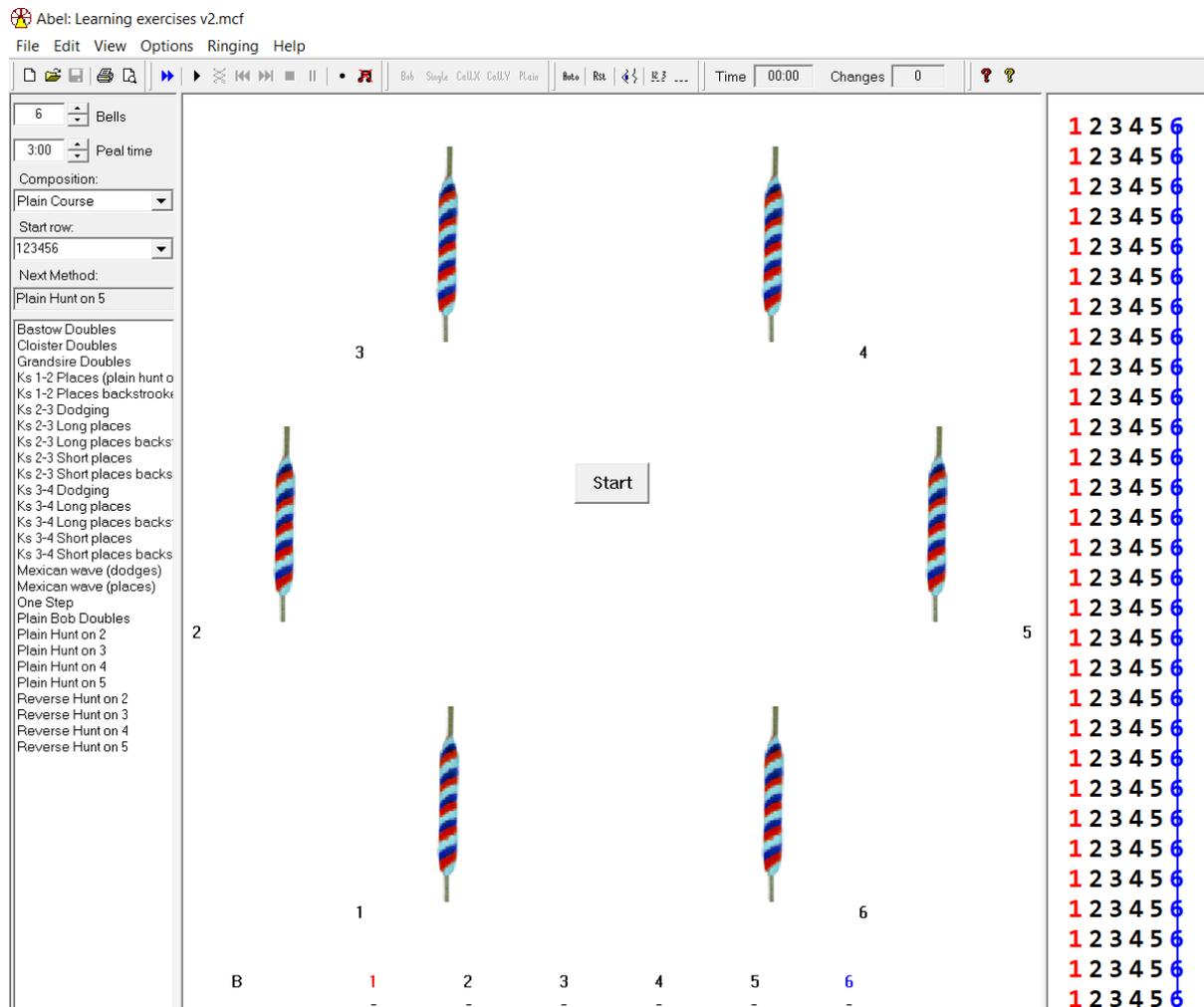


Opening the 'Learning Exercises' file

Then make sure 'User Bell Movement' is ticked in the 'View' menu.



You should ten end up with a screen like this:



Ringling rounds

Many ringers soon become conditioned to watching ropes, but bellringing is very much about the sound that comes out of the tower as watching ropes; some would say more so. Many people find that with a simulator after a little while they can hear their bell and do not need to watch ropes all the time. Do practice looking away from the screen altogether. It's not as difficult as you might imagine!

To learn to ring rounds on a simulator we suggest that you start with the tenor, as this is the easiest bell to hear. Then, once you have mastered ringing this, move to the 'inside' bells. If you have difficulty hearing six bells to start with, do start with three, four or five, and build up from there. You can even practice on eight, ten and twelve bells later!

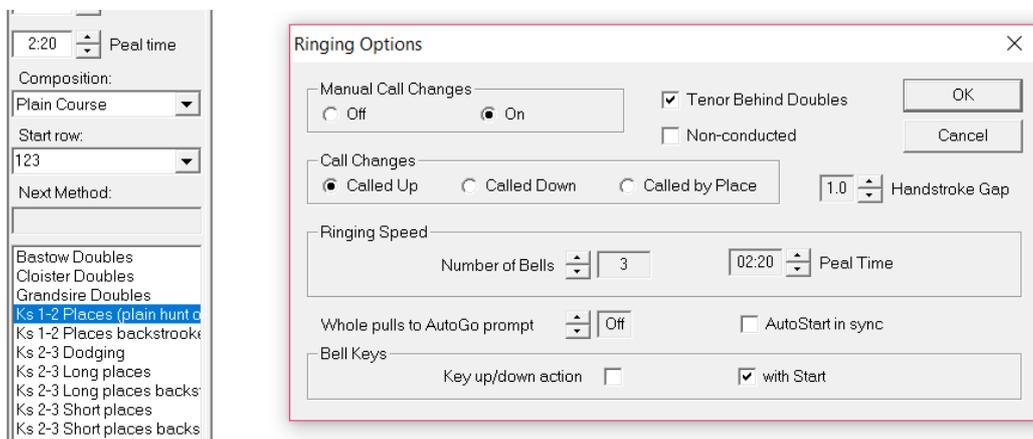
To ring as a particular bell, click on the icon and then release. The selected bell will then move to the bottom right hand corner of the screen, as shown above.

Also make sure that Abel rings at the correct speed for your ring of bells. For the average ring with a tenor of 15cwt the peal time is around 3h:00m, but on a lighter ring it might be 2h:45m and a heavier ring 3h:15m.

Don't try to start too fast. You can click on the up and down arrows beside the peal time to slow the speed down to 6h:00m, which some find very useful to start with.

If you have difficulty hearing six bells, try starting with three first and then move on to four and five, once you are ready. You can reduce the number of bells by clicking on the down arrow besides the number of bells, but you will get a warning message if you have selected a method that requires more bells. Therefore select a method like Ks 1-2 places. Abel does automatically adjust the peal time, so make sure that it is the speed you want.

Also make sure that 'Auto go' is set to 'Off' in the Ringing Options window.

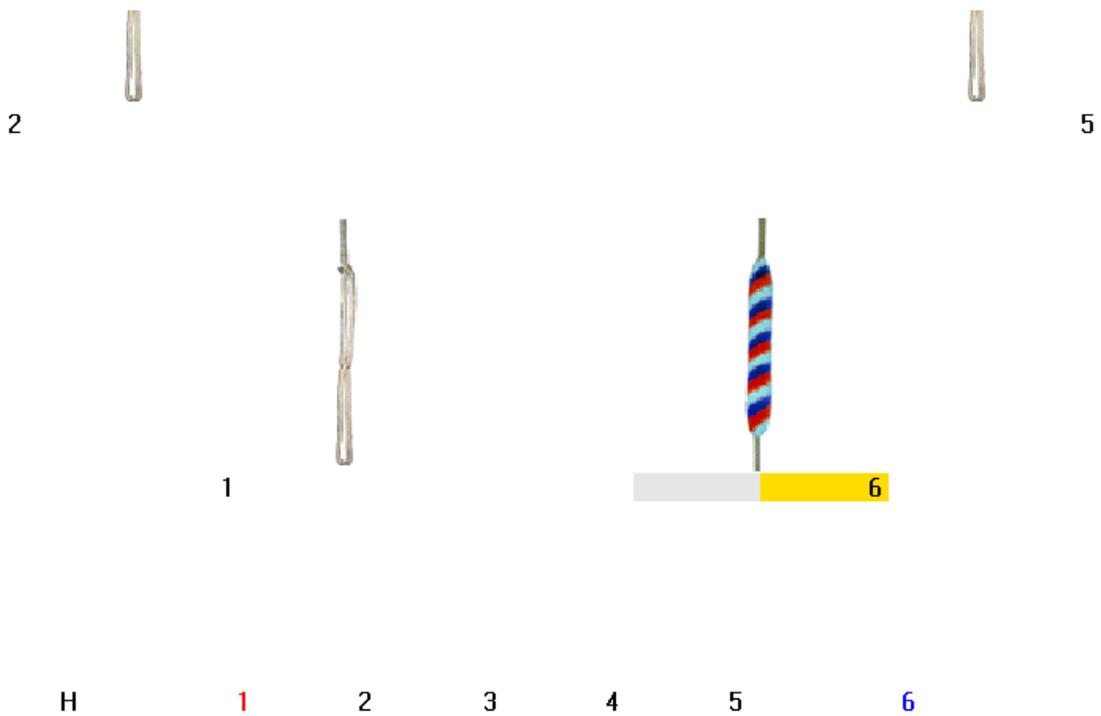


You can now practice listening and counting your place in the row at home by pressing the 'J' key on your keyboard.

How accurately did you strike your bell?

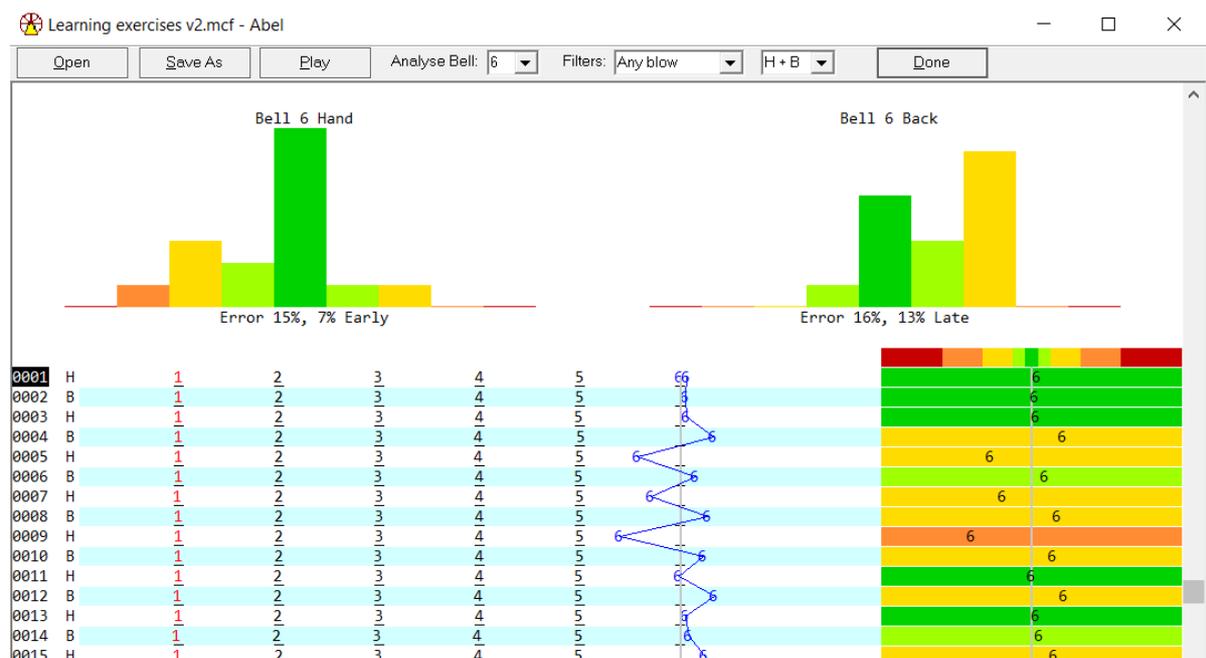
As long as 'Striking Display' is switched on in the 'View' menu, the bar underneath your bell bar will change colour to show how accurately you rang your bell on each stroke. If your bell is early, only the left hand end of the bar illuminates; if it is late, only the right hand end illuminates. The bars are colour coded shades of red/amber/green, depending on how far out you are. In the example below the 6th is moderately late.

At the bottom of the screen you will also see a display with a series of numbers. As you ring each row in addition to hearing your bell, you will be able to see how far out your bell is from its ideal position (indicated by the lines under each bell).



At the end you can also click on 'Ringing' ⇒ 'Review Striking' and this will show you graphically how accurate your ringing has been. Each row is analysed and colour coded, and there is a percentage error score for each stroke.

By clicking on the 'Play' button you can also play back a recording of your ringing again, and the number display at the bottom pops up along with this to help you see any errors visually.



What do the percentages mean?

A bell can be early or late (+ve or -ve) so even if the bell strikes quite randomly, the two can cancel each other out. The average error ignores whether the rows are early or late and is a more representative indication of how variable the striking is.

In the example above the bell has an average error of 15% - 16% and tendency to strike 7% early at hand and 13% late at back. You can see this from the saw-tooth pattern. Ideally you should be aiming for 10% average error on a tower bell or dumb bell, and 4% by pressing the 'J' key.

The limit of the human ear

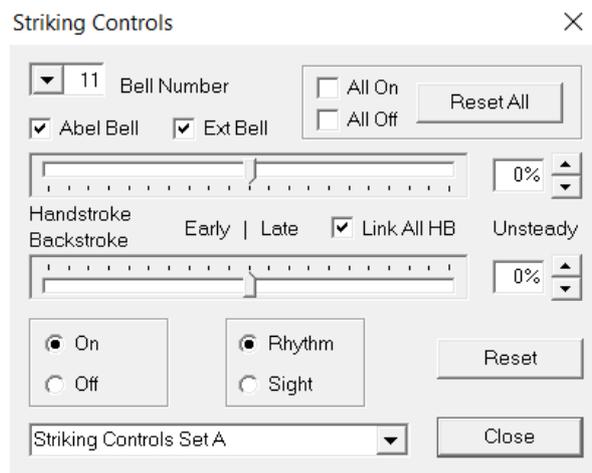
One row of ringing (1 2 3 4 5 6) lasts about two seconds. Therefore the gap between each bell is one third of a second = 0.333 seconds.

Multiply this by 1,000 = 333 milliseconds (Less if you are ringing on higher numbers).

Therefore 10% error = 33 milliseconds.

A 10% error is not really noticeable when ringing with real ringers and with practice most people can hear a 5% (15-20ms) inaccuracy of one bell if the other bells are all perfect.

Abel can be used to demonstrate inaccurate ringing. Right click a bell on screen to bring up the Striking Controls window, which allows you to adjust any bell to strike early or late on any stroke, in increments of 5%. Thus people can play 'spot the error', and also test the limits of their hearing of errors.



The three speeds of ringing

In change-ringing one of the basic conventions is that when you change places you usually only move up one place in a row, or down one place in a row. Of course, you can also stay still. Therefore, once you develop your control over the bell, and the feel of how hard and when you need to pull in order to wait to slow up, or cut in to speed up, you will start to develop the skill of ringing by rhythm

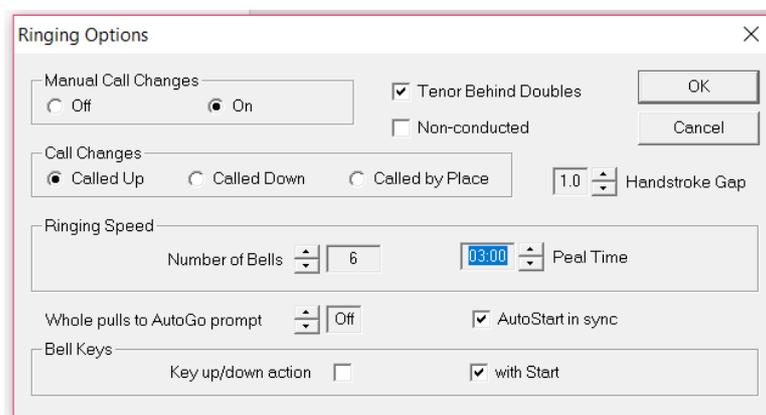
In addition, unless and until you can control the bell sufficiently accurately to move up or down one place, you will also be unable to see who you are following and develop the skill of ropesight, as you will actually be ringing at another position in the row.

Changing speed at handstroke

The skill to develop first is changing speed at handstroke, because that's what you need for call changes and for your first ringing exercises. You'll later learn to change speed at backstroke too, for more advanced exercises and for method ringing.

Your instructor may therefore start by practicing some simple call-changes with you, so that you only change speed occasionally. You can practice calling these changes yourself at home (just watching and not using the 'J' key) to help you understand what to do.

In the 'Options' ⇒ 'Ringing Options' menu and there are options to call changes by the bell going up or bell going down. You can also practice ringing call changes with the conductor calling the places that swap, rather bell up or by bell down.



To practice calling call changes, start Abel ringing rounds, then point the mouse over the bell which moves up or down in the row and click the mouse. If calling by place, click on a bell place, and the bell in that place moves up.

Changing more frequently at handstroke.

There are two pre-programmed exercises to cover this:

- **Long places** – where you move up or down one place every alternate handstroke
- **Short places** – where you move up or down one place every handstroke

	<u>1 2 3 4 5 6</u>
H	1 3 2 4 5 6
B	1 3 2 4 5 6
H	1 3 2 4 5 6
B	1 3 2 4 5 6
H	1 2 3 4 5 6
B	1 2 3 4 5 6
H	1 2 3 4 5 6
B	<u>1 2 3 4 5 6</u>

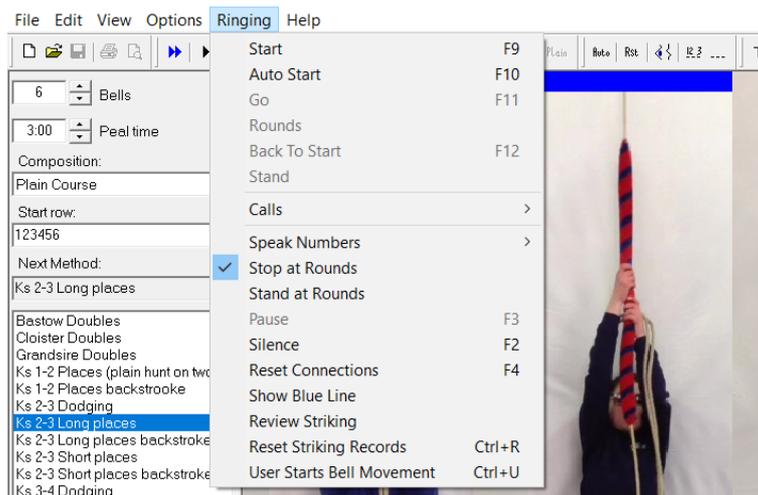
Long places

	<u>1 2 3 4 5 6</u>
H	1 3 2 4 5 6
B	1 3 2 4 5 6
H	1 2 3 4 5 6
B	<u>1 2 3 4 5 6</u>

Short places

Once you have opened Abel from the desktop, go to the 'File' ⇒ 'Open' menu, Then scroll down and click on 'Learning exercises' and then click on 'Open' on the exercise that you wish to practice. Also, go to the 'Ringing' menu and make sure that the stop at rounds box is checked, so that you only ring the exercise once before staying in rounds (once you have done this a few times and are confident, you can unclick the box to practice the exercise continuously).

Also make sure that 'Stand at rounds' is turned off as well, so that the bells just continue in rounds without standing; and the ringer/trainer can then click 'go' again to repeat the method/exercise.



Finally, select the bell on which you wish to practice on, as explained above.

In the example above 2-3 Long Places has been selected and the pupil is ringing bell number 2.

To begin press on a footswitch (or click on 'Start' with the mouse) and the bells will start ringing rounds. To ring the exercise press the footswitch again (or click on 'Go' with the mouse) and you will hear a command to start next handstroke.

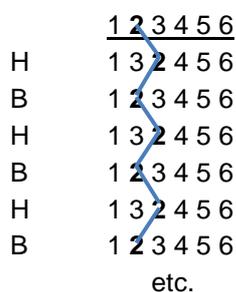
You can then repeat this as frequently as you like, and then unclick the 'stop at rounds' option, once you are confident. Then try short places. You will change position every handstroke, alternately ringing quick and then slow handstrokes.

Plain hunting by rhythm – Plain hunt on two

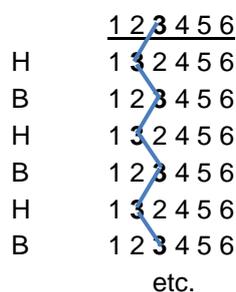
If you have mastered Kaleidoscope 1-2 places, you can then practice ringing Plain hunt on two – they are the same thing.

Changing speed on both strokes

The next step is to practice changing speed at both backstroke and handstroke. By ringing the 2nd in the first of the following exercises you can practice slow handstrokes and fast backstrokes and then by ringing the 3rd to the same exercise you can practice ringing the strokes the other way round.



Dodging 2-3
(2nd dodging 'up')



Dodging 2-3
(3rd dodging 'down')

Plain hunting by rhythm – Plain hunt on three

Once you have mastered changing speed at handstroke and backstroke, you can move on to plain hunt on three, with three bells covering. Select this form the list of learning exercises, as before.

Adding ropesight.

You can progress on a simulator ringing by rhythm alone, but if ringing with real ringers, you will need a degree of ropesight, However all bells differ, so ropesight is only a guide to when to pull, and really good ringing depends on listening, which is why simulators are so valuable a tool.

The moving ropes feature in Abel can also help you develop your ropesight. However, because of the time delay this is only practical in the 'workstation' mode on a bell or dumb-bell. The problem is not a limitation in Abel, but a limitation in people!

However if you want to practice ropesight at home you could just try watching and following one of the bells in the Moving Ringers view, without pressing the 'J' key.

The Whiting Society have produced an excellent DVD with lots of examples of ringing to watch along to. There are also on-line ropesight apps – e.g. <http://www.ringbell.co.uk/toolkit/ringbell.htm>

As a ropesight aid, In Abel's 'View' menu you can also tick 'Highlight Ringer to Follow' and a yellow bar will appear above that ringer, just before you need to pull. However, there is a danger that people will get addicted to looking for the yellow highlight, rather than the moving rope/sally/hands, so it's best not to use this feature too much.



Bastow Doubles

In Bastow the treble rings handstroke and backstroke alternately in 1st and 2nd position, but follows a different bell (2, 3, 4 or 5 each time). Once you have reached the stage where you instinctively know how much to hold up or cut in at handstroke, you can ring the treble to Bastow and practice spotting who you are following.

Don't forget, concentrate on counting your place and holding up or cutting in the right amount as your first priority. You will see what you are doing, without being able to do this first.

Cloister Doubles

If you have mastered Plain Hunt on three and Bastow, then try ringing Cloister doubles.

In Cloister (with a Plain Bob Start) the treble and 2nd both move between 1st and 3rd place following different bells each time. This is good practice at counting a small number of places, and spotting ropes by ropesight, whether on a simulator, or with a real band.

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
H	2	1	4	3	5	6
B	2	1	3	4	5	6
H	1	2	4	3	5	6
B	1	4	2	5	3	6
H	4	1	5	2	3	6
B	4	1	2	5	3	6
H	1	4	5	2	3	6
B	1	5	4	3	2	6
H	5	1	3	4	2	6
B	5	1	4	3	2	6
H	1	5	3	4	2	6
B	1	3	5	2	4	6
H	3	1	2	5	4	6
B	3	1	5	2	4	6
H	1	3	2	5	4	6
B	1	2	3	4	5	6

Bastow

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
H	2	1	4	3	5	6
B	2	4	1	5	3	6
H	4	2	1	3	5	6
B	4	1	2	5	3	6
H	1	4	2	3	5	6
B	1	2	4	5	3	6
H	2	1	5	4	3	6
B	2	5	1	3	4	6
H	5	2	1	4	3	6
B	5	1	2	3	4	6
H	1	5	2	4	3	6
B	1	2	5	3	4	6
H	2	1	3	5	4	6
B	2	3	1	4	5	6
H	3	2	1	5	4	6
B	3	1	2	4	5	6
H	1	3	2	5	4	6
B	1	2	3	4	5	6

Cloister

Plain hunting by ropesight and rhythm – Plain hunt on four

You can then move on to plain hunt on four.

You can also try Plain Bob Minimus, where the treble moves up and down three times, following the others in different orders. To minimise the differences in speed, ring this with two bells covering.

Plain hunting by ropesight and rhythm – Plain hunt on five

You can then move on to plain hunt on five.

Once you can do this, you can try Grandsire Doubles in which the treble and second both plain hunt. If you are ringing the treble, you will always start with the 2nd at the beginning of each run up or down, so you only really have three other bells to worry about. Plain Bob doubles lasts 40 changes and the treble hunts up and down four times, the other four inside bells swapping over each time.

Further Advice and Support

The Association of Ringing Teachers publishes a book: Teaching with Simulators, which can be obtained by visiting their on-line shop <http://ringingteachers.org/resource-centre/shop>

There are also a series of you-tube videos covering most of the exercises in these notes, and Abel has extensive Help files..

Workshops are also held in various parts of the country and can be booked by visiting the upcoming courses and workshops page <https://smartringer.org/public/daycourses/>

There is also a Ringing Simulator Users and Suppliers Facebook page, where you can communicate with other users and the software writers and hardware suppliers.

<https://www.facebook.com/groups/1441867412528870/>

We also have a network of experienced users who can help you set up and troubleshoot any problems that you may have. In the first instance contact the ART Administrator.