Beginning Sailing
A Children's Guide
Optimists and Toppers

Keah Edwards

Author's Note

I learnt to sail at age nine and have since raced in many national competitions and become a qualified dinghy instructor. My childhood has been spent sailing and training mainly in Optimist and Topper dinghies. A 50-year-old wooden Optimist was my first boat, which I named 'Little Grebe' after the birds on the river where I learnt to sail. Sailing has provided me with many experiences that developed my confidence, independence and love of the sport. I started writing this book as part of my A-level studies, inspired by the lack of approachable and helpful sailing guides for children. My hope is that this book will encourage more young people to take up sailing and discover the joy it has brought to so many people.

– *Keah Edwards*

Acknowledgements:

The author would like to thank Gawain Edwards for taking the cover photograph; her parents Karen and Gawain Edwards for taking her all over the country for sailing events; and all the instructors and coaches who have improved her sailing over the years.

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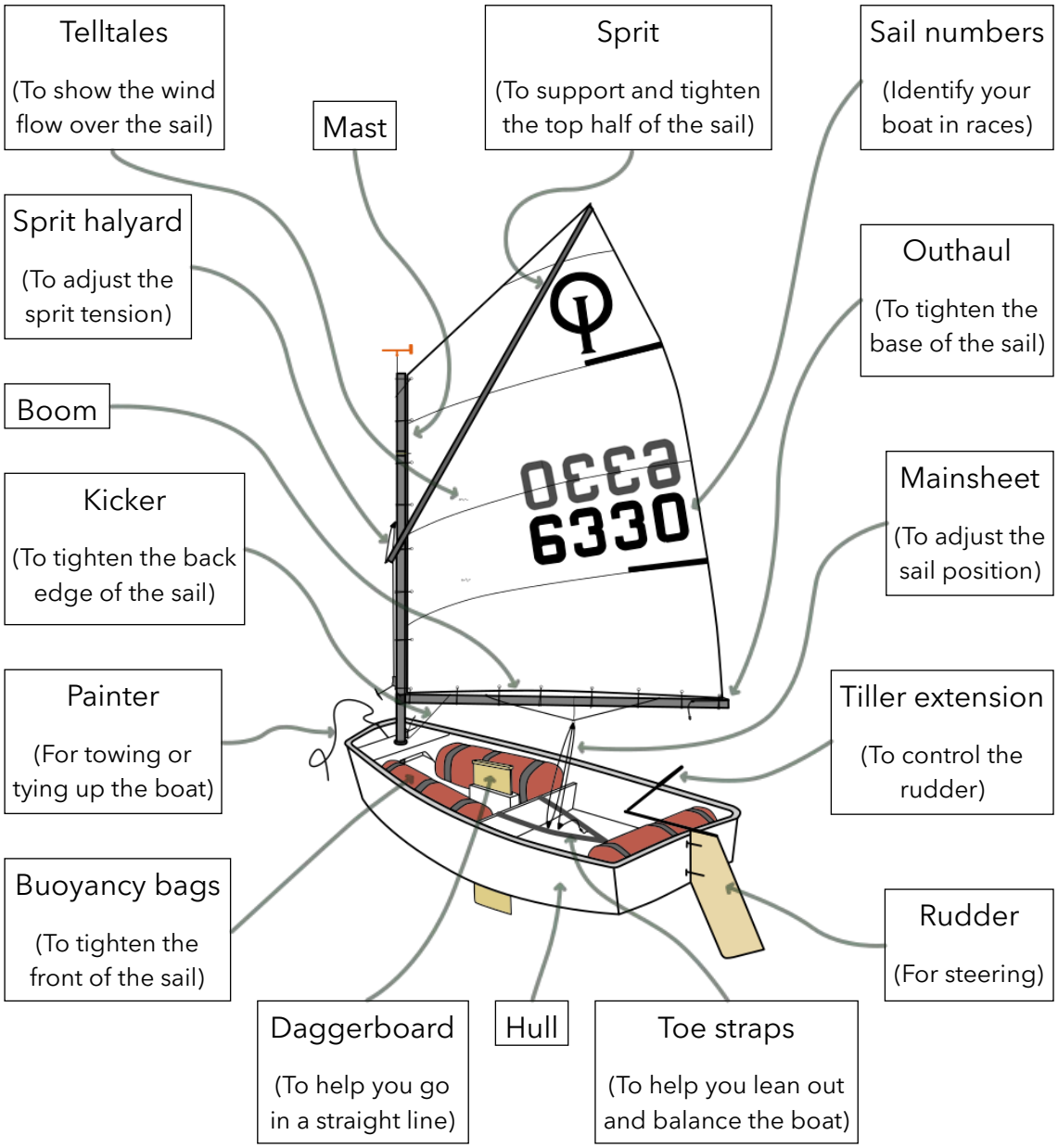
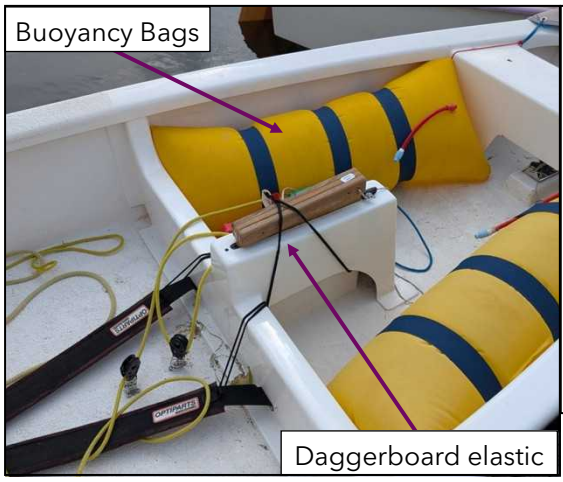
Parts of the boat - Optimist

Before you start sailing, you need to learn the purpose of each boat part. While on the water, you need to use the tiller and rudder to control the direction your boat moves in. The mainsheet allows you to control the sail position depending on the wind and the direction you are sailing in. The daggerboard helps to stop the boat from drifting sideways. The sprit needs to be tight to remove creases from the sail so that wind flows over it smoothly.



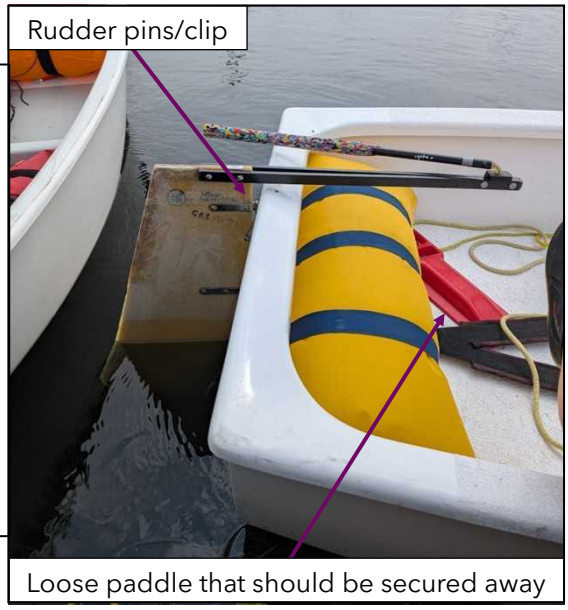


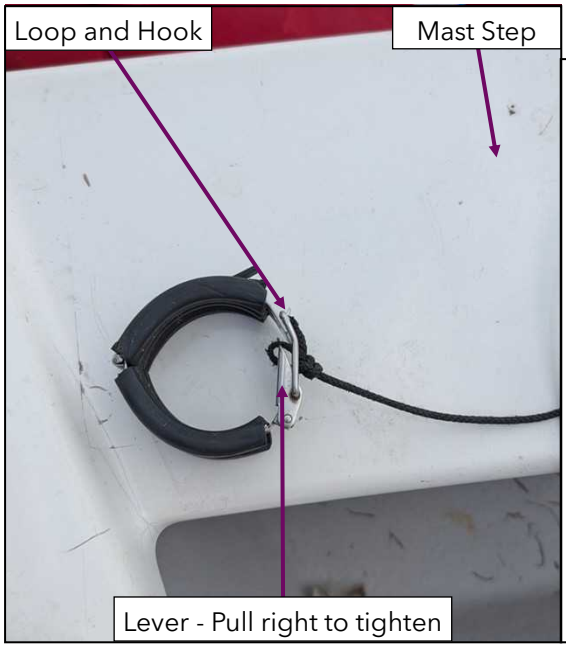
The three buoyancy bags should be fully inflated when the boat is in the water. They prevent your boat from sinking if you capsize. When stored you should let some air out so that they do not pop in hot weather.

Your daggerboard should have elastic to hold it in place.

The rudder clips on using two pins and a clip. If this clip is bent out of position, then the rudder may fall out. So, check that it is well attached.

The back buoyancy bag is a good place to store your paddle. You can tuck it underneath the straps and tie a short length of elastic around one of them and the paddle.





The mast clamp is really important. It stops your mast falling out and damaging your boat if you capsize.

It clamps tightly around the base of the mast. You should attach it as high as possible underneath the mast step.

Latch the loop over the hook around the mast. Then pull the lever closed until it clicks into place. This is difficult and it is hard to see what you are doing, so make sure to practice and ensure the mast is secure.

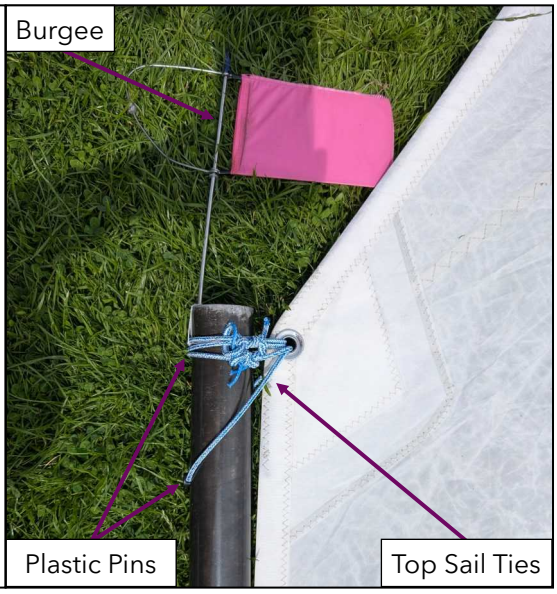
The Sprit Halyard is used to adjust the tension in the sprit. The sprit should be on the starboard side and hooks into a loop in the sprit halyard. Any diagonal creases in the sail mean the sprit tension is badly adjusted.

The kicker rope should be threaded up through the cleat and a figure of eight knot tied in the end. With the sail in the boat, pull the mainsheet in really tight and then you will be able to tighten the kicker.

Sail ties should be tied with a reef knot. You should replace all missing sail ties.

The sail ties at the top of the mast are slightly different. They both go through the same eyelet in the sail and should hold this tight to the mast. Each of the top ties have a plastic pin that goes through a hole in the mast. The burgee then goes through both pins inside the top of the mast. This is a bit fiddly but you will get it in eventually.

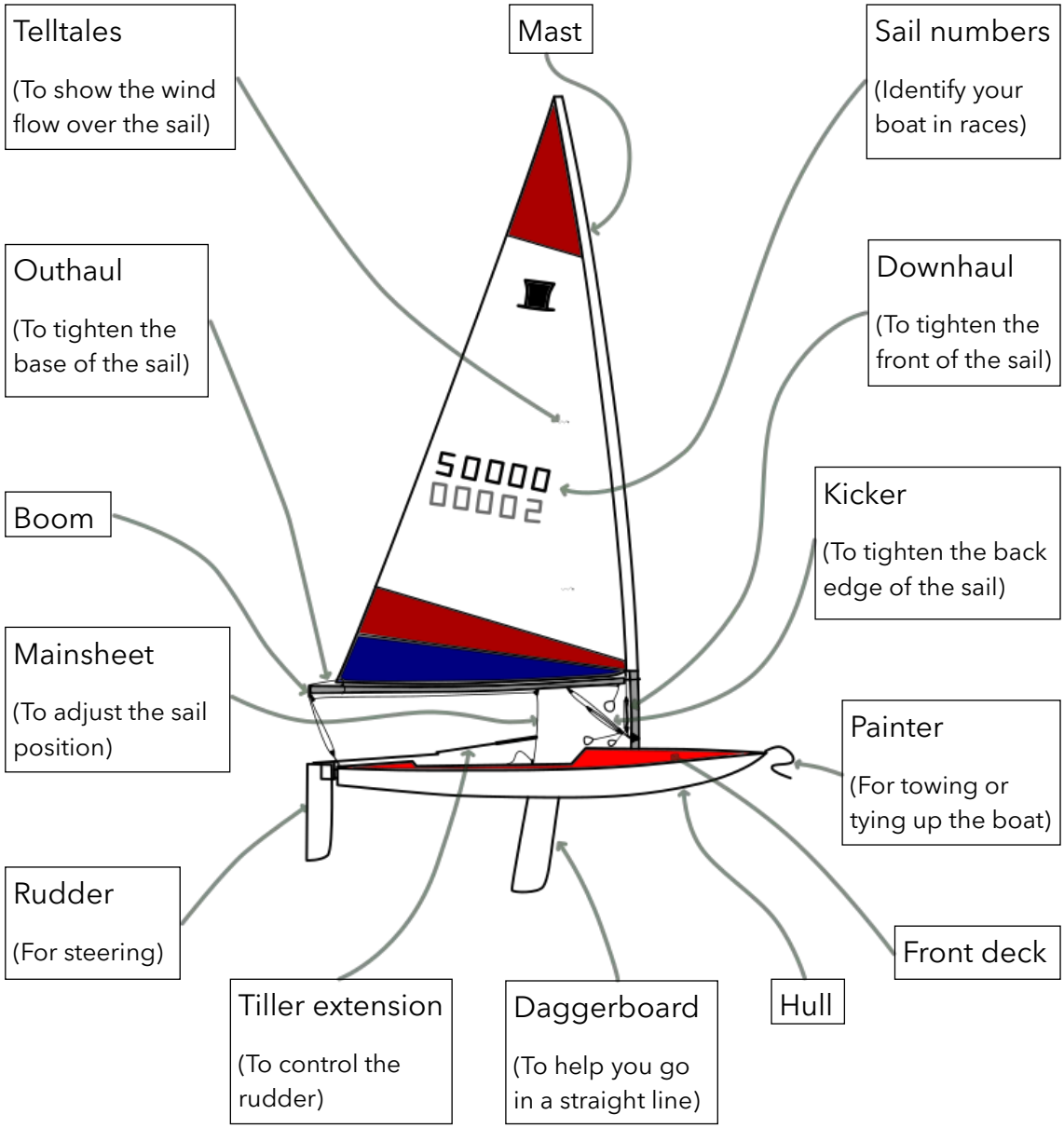
Try not to bend the burgee as it may get stuck on the sail and not turn properly, like this one.



The outhaul is adjusted at the end of the boom, so it is hard to change while sailing. In strong wind you want to pull it tight. While the rest of the time, the bottom of the sail should have a gentle curve, with the outhaul slightly less tight.

Parts of the boat - Topper

Before you start sailing, you need to learn the parts of your boat and what they do. While on the water, you need to use the tiller and rudder to control the direction your boat moves in. The mainsheet allows you to control the sail position depending on the wind and the direction you are sailing in. The daggerboard helps to stop the boat from drifting sideways.

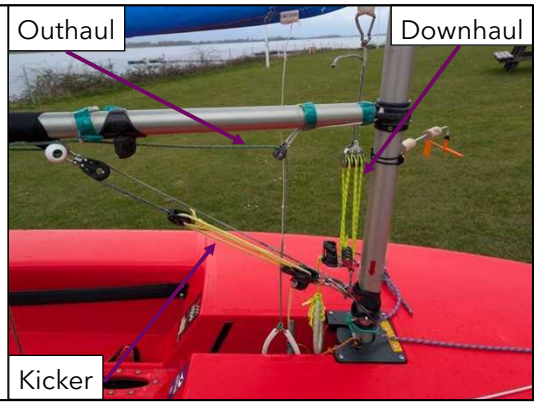


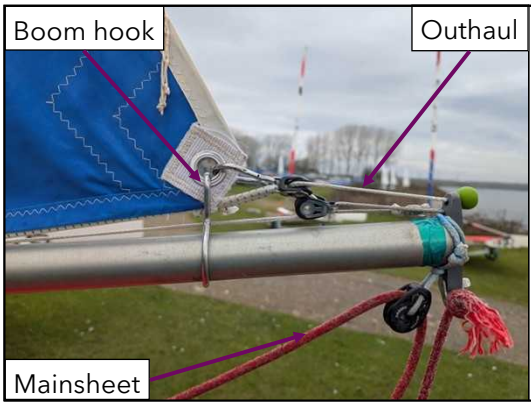
The mainsheet moves across the boat on the traveller. Make sure to keep the traveller tight so that the mainsheet is kept in the corner of the boat.

The bung keeps water out of the hull, you should tighten it before sailing and take it out when on land to prevent damage to the hull in hot weather.

The kicker is clipped onto rings on the boom and mast. An extra rope and pulley can be added for racing, as in the picture. It should be tight in all weather.

The downhaul clips onto the same ring on the mast and to a loop on the bottom of the sail. It should only be tightened in strong or gusty wind.

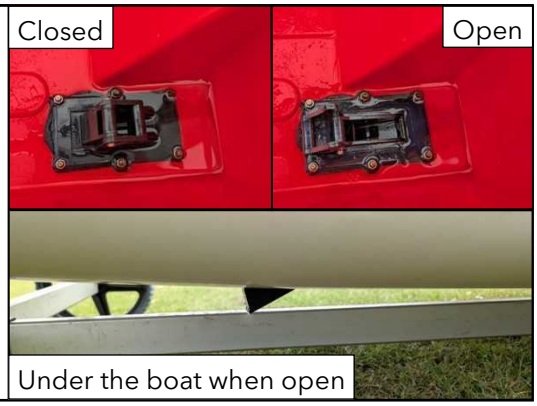


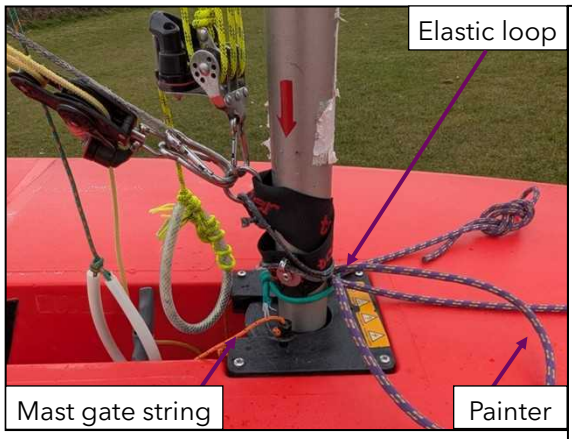


The outhaul clips onto the back corner of the sail but is adjusted using the cleat nearer the mast. The hook holds the sail down and close to the boom.

In light wind the outhaul should be fairly loose. However in strong wind, you need to pull it tight to depower the sail, this will create a crease along the sail.

The self-bailer on a topper allows water to drain out of the boat while you are sailing. Make sure it is closed before launching and when sailing slowly. Once you are moving fast enough, you can open it and allow the water to flow out of the boat. Be careful not to stand on the self-bailer as they are fragile.





The longer end of the painter can be tucked into an elastic loop on the mast for easy access. While the short end should be clipped to the daggerboard elastic to prevent the daggerboard falling out during capsize. When closing the mast gate make sure to tie a small knot in the string as the pin can easily fall out of the hole. This prevents the mast from falling out of the boat.

The longer end of the painter should come out of the top of the deck hole and reach to the middle of the cockpit when a loop is tied in the end. While the shorter end should be about 50 cm long and pulled tight by the daggerboard elastic.

Make sure that you use a fairly thick rope for the painter so that it does not gradually cut through the hull when pulled on a regular basis.

The rudder attaches to the back of the boat using metal clips, make sure that the spring like plate will stop the rudder falling out if you capsize.

The tiller and extension should both go under the back part of the traveller and over the forward part.

The traveller rope should be tight so the mainsheet block easily moves to the corners of the boat.

Clothing

It is very important to make sure you are wearing the correct clothing for sailing, this will depend on the weather and your location.

Essentials:

- Buoyancy aid - Check the weight range and that it fits you tightly.
- Wet boots - Closed toe shoes should have grip and protect your feet.
- Gloves - Can be fingerless or made of neoprene, these protect your hands from rubbing on the ropes as well as keeping them warm.

Hot weather:

- Shorts and a T-shirt - Made from a quick drying material, e.g. Polyester.
- Hat or Visor and Sun Cream - Water reflects the sunlight, so you need extra protection against the UV light.

Cold weather or sailing on the sea:

- Wetsuit - This can be full length or a shorty depending on temperature.
- Spray Jacket - Keeps you dry when water splashes up at you.
- Hat - A beanie or waterproof hat is important for keeping your head warm.

Safety

Always make sure you have safety cover and tell other people before you launch or start sailing. You must be wearing a lifejacket or buoyancy aid and it is your responsibility to make sure that your boat is safe to sail in.

Considering the weather, make sure that you are happy with going sailing in the wind strength and able to stay in control of your boat at all times. If a thunder storm occurs, get off the water immediately to avoid getting struck by lightning.

For coastal sailing, be aware of the tide strength as you need to be able to sail against the current. You should also know when high and low tide occurs so that you do not get stuck and unable to sail back to your club.

Checklist for Before you Launch

Before you launch your boat and sail off, it is very important that you are safe and your boat is ready to go. Below is a list of things you should check depending on your type of boat.

You could stick a copy of this to your boat so that you never forget anything. Consider if there are any other things that you want to add to this list.

Everyone:

- → Wearing lifejacket or buoyancy aid correctly
- → Wearing suitable clothing
- → Safety boat nearby
- → The wind, tide and other conditions are safe for *you* to sail in
- → Water-bottle tied on

Optimists:

- → All 3 buoyancy bags inflated
- → Mast clamp preventing the mast from being lifted out
- → Bailer tied on with elastic
- → Small paddle

Toppers:

- → Bung in correctly and tight
- → Knot in both ends of the mainsheet
- → Knot in the mast gate string
- → Daggerboard clipped on

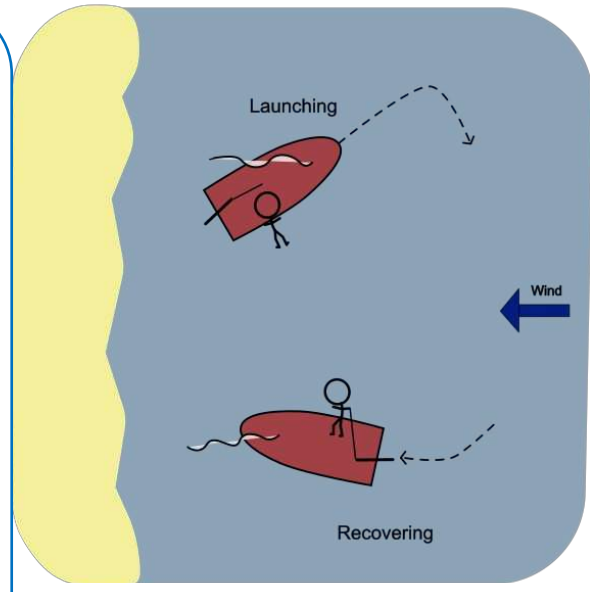
Launching and Recovering

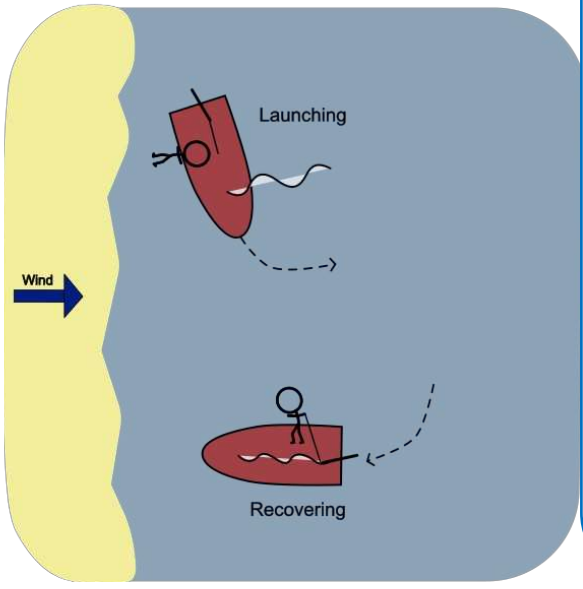
You need to be able to launch and recover your boat safely and without running aground, as this will damage the boat. For this, you need to have good speed control and know where the wind is coming from.

Onshore wind

For launching, you will need to walk the boat out deep enough to put the rudder and daggerboard mostly down. Climb in, quickly pull the sail in and lower the daggerboard before your boat drifts sideways towards the beach.

For recovering, detach the mainsheet and lift out the daggerboard before you get near the shore. Then lift the rudder and jump out when it gets shallow enough. If going too fast, turn sideways and get out sooner.





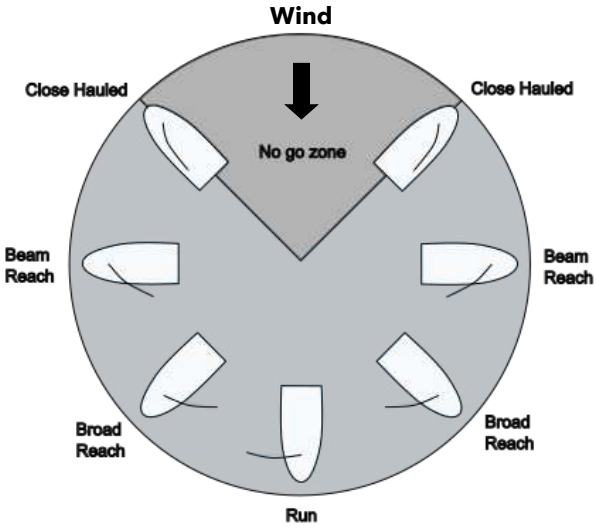
Offshore wind

For launching, hold the boat across the wind with the sail fully out. Then put the rudder and daggerboard partly down and climb in. You can then pull the sail in slightly and turn away from the wind and beach.

For recovering, sail in on a close hauled course and then turn into the wind as you get nearer. Lift the daggerboard and rudder and then jump out. If going too fast, push and hold the boom away from you towards the wind and the boat should stop.

Points of sail

The points sail are the different directions you might sail in compared to the wind direction. Each point of sail needs the mainsheet, daggerboard and you to be in different positions to allow you to go fast and forwards.



- **Close Hauled** - You cannot sail directly into the wind because the sail will flap. This means that you have to sail at about a 45 degree angle from the wind.
- **Beam Reach** - The fastest point of sail, this is when you are at 90 degrees to the wind and have the sail partway out.
- **Run** - When you are sailing directly away from the wind, you need the sail all the way out at 90 degrees and be aware that you may gybe unexpectedly.
- **Broad Reach** - When sailing mostly downwind, between a beam reach and a run. This angle makes you less likely to gybe by mistake.

The **No Go Zone** is the angle to the wind that you cannot sail in, about 45 degrees either side of the direction that the wind is coming from. If you try to sail in this area then you may get stuck with the sail flapping and drift backwards, because the wind cannot flow over the sail smoothly. This is called being stuck "head to wind" or "in irons", you can get out of this by pushing the sail and the tiller in the same direction and holding them there until the boat turns around. Then you need to straighten the tiller out before you pull the sail in and start moving again.

You should now go and try sailing a close hauled course to see how close to the wind you can sail without getting stuck head to wind. Try and identify what other points of sail you use while on the water.

Optimists

Sailing upwind

- When on a close hauled course, pull the sail all the way in so that the end of the boom is over the back corner of the boat.
- The daggerboard should be fully down to prevent you sliding sideways
- Sit forwards in the boat in line with the daggerboard case, but on the side of the boat. This lifts the back of the boat out of the water to help speed you up.
- If the luff (front edge) of the sail starts to back or flicker then you need to bear away from the wind a tiny bit, until it stops.

Downwind

- Let the sail out to 90 degrees so that it fills with wind nicely.
- The daggerboard should be lifted about two thirds of the way out, so that it is just below the boom. Any higher and the boom will hit it and cause a capsize if you gybe.
- Sit slightly less forwards in the boat, just behind the daggerboard case, on the side of the boat.
- Be prepared to gybe if you see the burgee spinning or the leech (back edge) of the sail flicking. Remember to duck under the boom!

Reaching

- The sail should be about halfway out if you let it out until it starts to flap and then pull the mainsheet back in a tiny bit.
- Lift the daggerboard about a quarter of the way up. If you are on more of a broad reach then you can lift it a bit more.
- Sit on the side of the boat near to the daggerboard case.

While you are sailing, try to remember the "Five Essentials" of daggerboard position, sail settings and position, trim (keeping the boat flat front to back), balance (keeping the boat flat side to side), and course made good (your angle relative to the wind).

Toppers

Sailing upwind

- When on a close hauled course, pull the sail all the way so that the mainsheet blocks are almost touching.
- The daggerboard should be fully down to prevent you sliding sideways
- Sit as far forwards as you can while still being able to steer properly. This lifts the back of the boat out of the water to help speed you up.
- If the luff (front edge) of the sail starts to back or flicker then you need to bear away from the wind a tiny bit, until it stops.
- Pull the kicker on as tightly as you can, this should temporarily bend the boom and mast.

Downwind

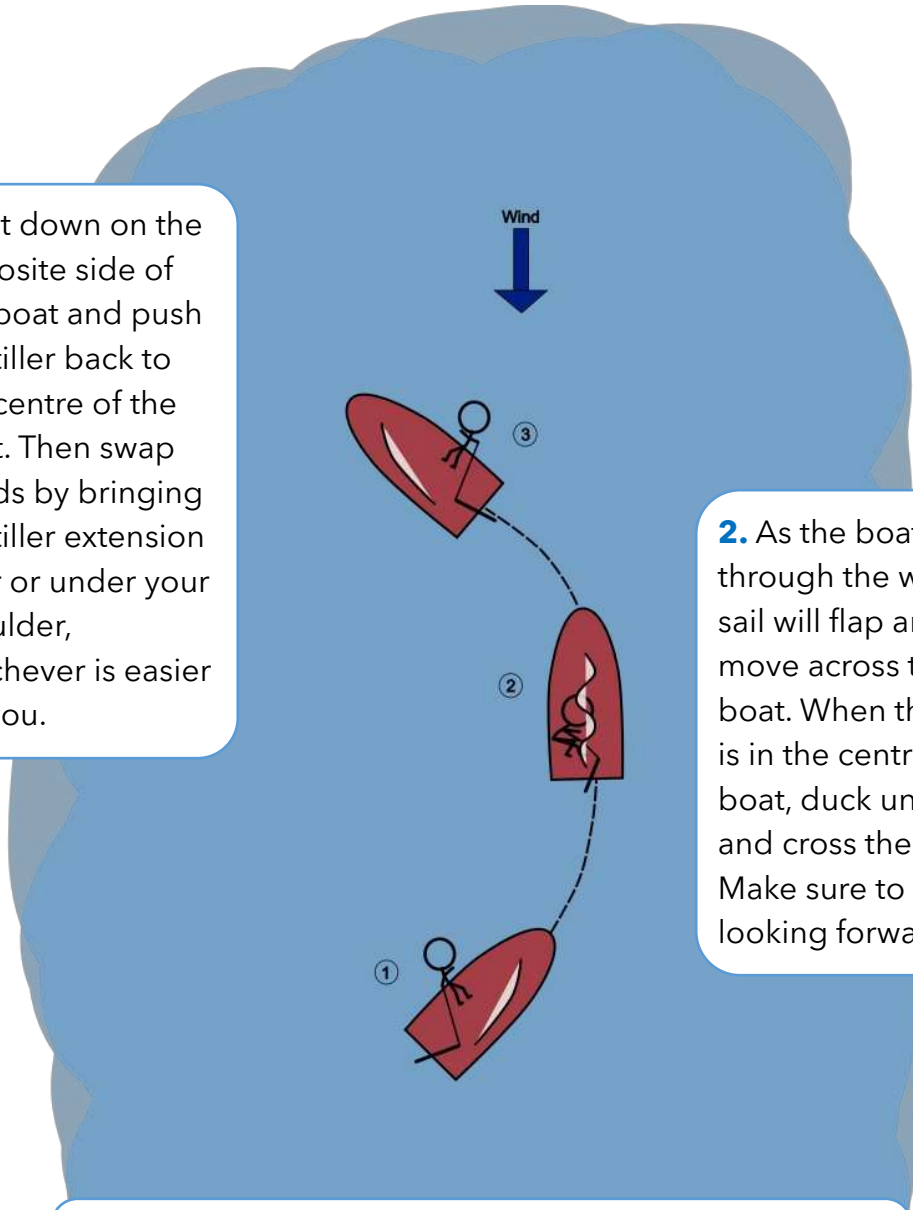
- Let the sail out to 90 degrees so that it fills with wind nicely.
- The daggerboard should be lifted about half the way out, this reduces drag.
- Sit just behind the daggerboard case, on the side of the boat. In light wind you can heel the boat on top of you slightly.
- Be prepared to gybe if you see the leech (back edge) of the sail flicking. Try to get across the boat before the boom to prevent capsize.
- Let the kicker off almost completely, and loosen the outhaul a bit.

Reaching

- The sail should be about halfway out if you let it out until it starts to fill from the back and then pull the mainsheet back in a tiny bit.
- Lift the daggerboard to be level with the front deck. If you are on more of a broad reach then you can lift it a bit more.
- Sit on the side of the boat near to the daggerboard case. In strong and medium wind you will need to hike out.
- Let the kicker off a small amount.

Tacking

Tacking is when you change direction by turning the front of your boat through the wind. This is needed when you are sailing upwind on a close hauled course.



3. Sit down on the opposite side of the boat and push the tiller back to the centre of the boat. Then swap hands by bringing the tiller extension over or under your shoulder, whichever is easier for you.

2. As the boat turns through the wind the sail will flap and move across the boat. When the sail is in the centre of the boat, duck under it and cross the boat. Make sure to keep looking forwards.

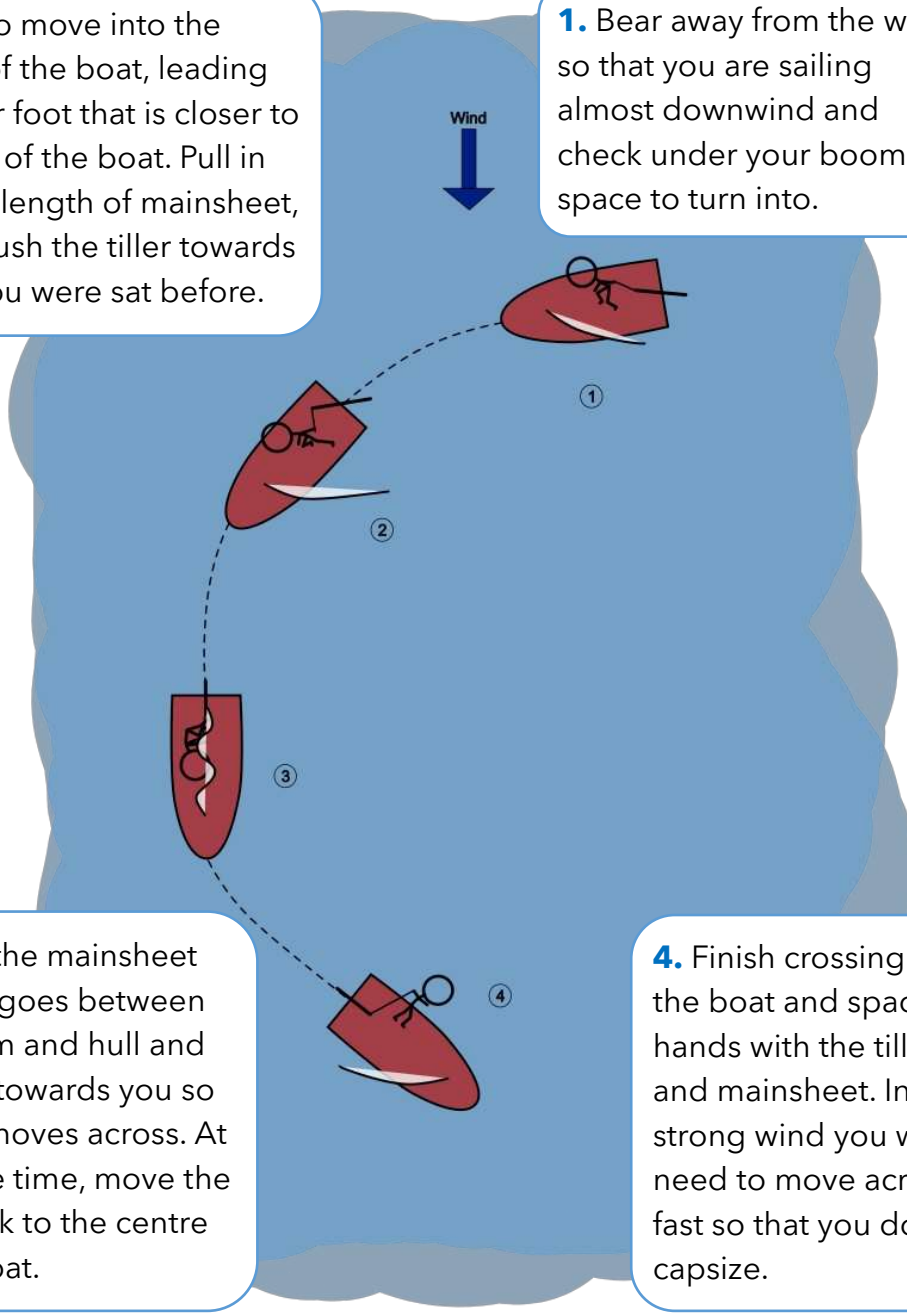
1. Before tacking, check over your shoulder to make sure you will not hit anything. Then, start the turn by pushing the tiller and tiller extension to the other side of the boat and move your back foot across the boat.

Gybing

Gybing is when you change direction by turning the front of your boat away from the wind. You might need this when rounding a mark that is downwind. Be careful as the sail will swing across the boat quite fast and forcefully, so make sure to duck under the boom.

2. Start to move into the middle of the boat, leading with your foot that is closer to the back of the boat. Pull in an arm's length of mainsheet, as you push the tiller towards where you were sat before.

1. Bear away from the wind so that you are sailing almost downwind and check under your boom for space to turn into.



3. Grab the mainsheet where it goes between the boom and hull and pull this towards you so the sail moves across. At the same time, move the tiller back to the centre of the boat.

4. Finish crossing the boat and space hands with the tiller and mainsheet. In strong wind you will need to move across fast so that you don't capsize.

Capsizing

In strong wind you might capsize, this is when the wind pushes your boat all the way over and the sail hits the water. Sometimes the boat might tip upside down, this is called turtling. The main things to remember are not to panic and keep hold of your boat at all times.

1. Hold onto the mainsheet and swim around the back of the boat. You should also check that the rudder is still attached.

2. Grab hold of the daggerboard and pull down on it. In toppers, you may need to climb on top of the daggerboard.

3. Wait for the sail to come out of the water and the boat to tip up.

4. Grab the side of the boat and pull it flat. Be cautious as it may capsize on top of you, depending on the wind direction.

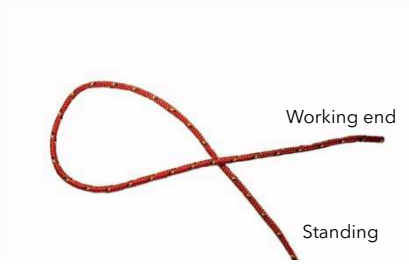
5. Pull yourself into the boat and start sailing again. In an optimist you will need to bail most of the water out before you can get the boat to move anywhere.

Knots

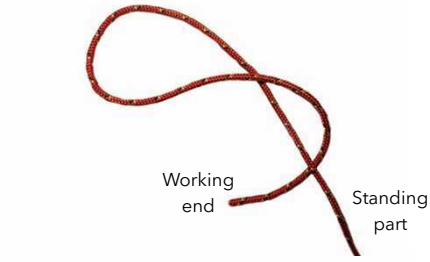
Figure of Eight

The figure of eight knot is often used as a stopper knot to prevent ropes from slipping through a cleat or pulley. You will need to have one on the end of your mainsheet and optimist kicker. This knot is easy to untie as well.

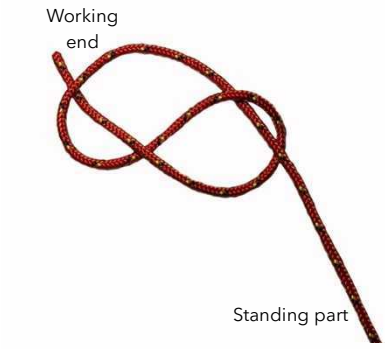
Also, you will need to be able to tie this knot for the RYA stage 1 certificate.



1. Put the "working" end over the "standing part" to create a loop.



2. Pass the working end behind the standing part of the rope.



3. Take the end down through the first loop created.

4. Pull the ends tight and the knot should look a bit like the number eight.

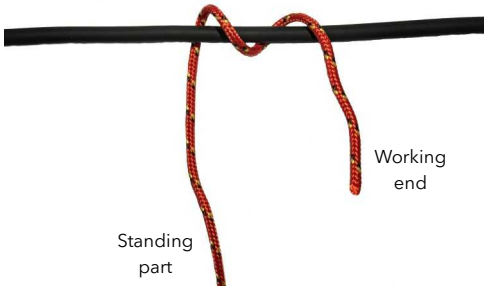
Knots

Round Turn and Two Half-Hitches

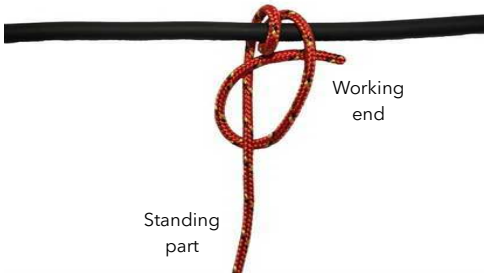
The round turn and two half-hitches is mainly used to attach your boat to a mooring ring such as on a pontoon or river bank so that it does not float away. If you have a very long painter you can fold the rope in half first.

You will need to be able to tie this knot for the RYA stage 2 certificate.

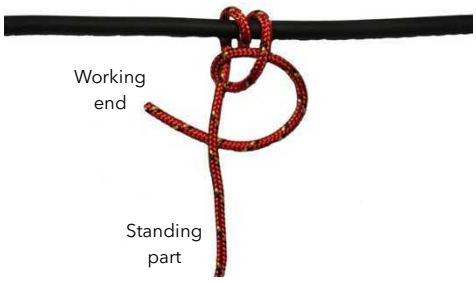
1. Pass the working end behind and then down and over the bar or ring.



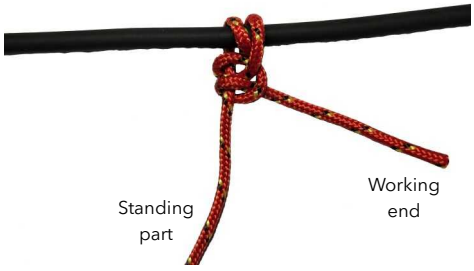
2. Then repeat the previous action to complete the "Round turn" part of the knot.



3. Pass the working end behind the standing part and then through the loop that this process has created.



4. Pass the working end behind the standing part and through the new loop again. This process has created the 2 half-hitches.



5. Pull both ends tight and then the knot is finished. Make sure you have tied it correctly before leaving your boat tied up.

★ Alternatively, you could have tied it through a ring, as shown.

Long Painter

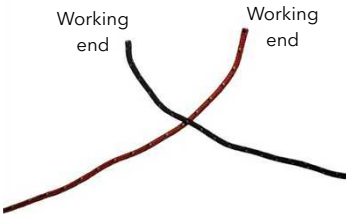
If your boat has a very long painter then it can be quite difficult to pull the full length of the rope through each time you tie it up. To make this easier, you can fold the rope in half and then tie your round turn and two half-hitches using the doubled over section.

Knots

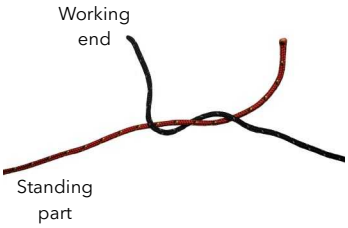
Reef (or square) Knot

This knot is traditionally used on larger boats to "Reef" the sail in strong wind, however it is very useful for tying two ends of a rope together.

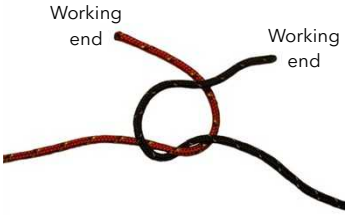
You will need to be able to tie this knot for the RYA stage 2 certificate.



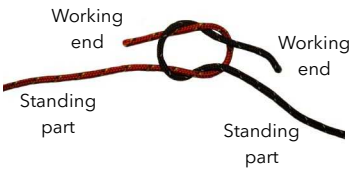
1. Pass the right hand working end (black) over the left (red).



2. Then pass it under the left (red) standing part.



3. Then pass the new left working end (black) over the new right working end (red).



4. Then pass it through the central loop that this has created. The working end and standing part of each rope should come out of the same side of the loop.

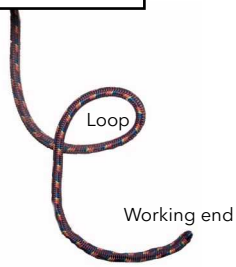
5. Pull tight and make sure you have enough length on each end to prevent it from slipping out.

Knots

Bowline

A bowline creates a strong loop, that can be used to tie your bailers to the buoyancy bag straps or to create a towing loop in your painter rope.

You will need to learn this for your RYA stage 3.



1. Create a loop by twisting the "working" end over the rest of the rope. (Creating the rabbit hole)

2. Pass the end up through the loop. (Rabbit comes out of the hole)

3. Take the end behind the rest of the rope. (Rabbit runs around the tree)

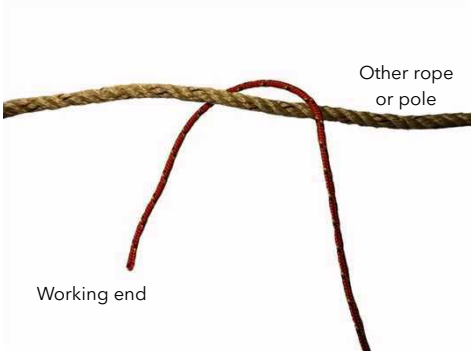
4. Pass the end down through the same loop as before. (Rabbit goes back into the hole)

5. Pull it tight, and it should look like this. Make sure that the working end is long enough that it will not work loose from the knot.

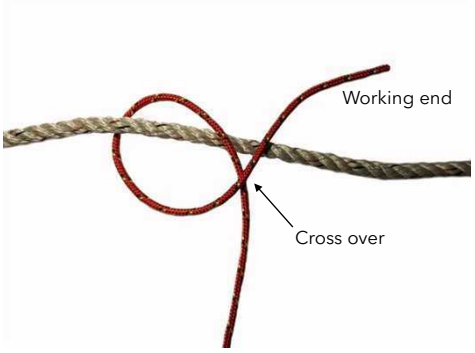
Knots

Clove Hitch

The clove hitch is often used for tying a rope to a post for mooring a boat to a bank or jetty. Also, for the RYA stage 3 certificate you will need to be able to tie a clove hitch.



1. Pass the working end of the rope behind the other rope, take it slightly to one side. As you can see in this case the working end is more to the left of the standing end.



2. Then pass the end across, in front of itself, and over to the right. This is the "cross over" bit for the next step.

3. Bring the end behind the other rope and then up between the other rope and the "cross over" bit of itself, as shown.

4. When you pull the ends tight, the clove hitch will look a little bit like a stylised capital letter H. (ℋ)

Activities to Try

To help improve your sailing confidence, you can try some of these activities and challenges while leisure sailing or with friends.

Whistle Game

With a small group of boats in light wind, get one person to be in charge of blowing a whistle to choose the challenges. For example: one whistle is walk around the front of your mast, two whistles is sail while standing on the side of your boat, and three whistles is do a 360 degree turn.

Knot Practice

Try tying knots with your eyes closed or race a friend to see who can tie the perfect knot fastest. There a lots of cool knots around, you could find a tricky one and then show someone else how to tie it too.

Match Racing

Two boats of similar ability sail upwind, on the same tack, next to each other. The boat that is slightly down wind tries to overtake the other by tacking quickly. Since the upwind boat wants to stay in front, they will also tack to try and block their friend's wind. This is helpful for practising your efficient tacking and thinking about where the wind is coming from.

Sprit Paddling - Optimists

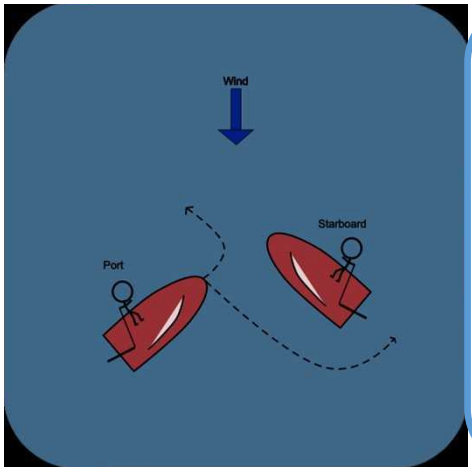
If the wind is not good for sailing, then you can take the sail and rudder out of the boat. Sitting on the front of the boat, use the sprit pole to paddle your boat like a kayak. If you are struggling to steer, then put the rudder back in and ask someone else to control the direction.

Dry Capsizing - Toppers

Instead of swimming around your boat to right it, you can climb over. When you see the mast about to hit the water, climb over the side of the boat and stand on the daggerboard until the sail comes back up. Then scramble back into the boat quickly to stay fairly dry.

Basic Rules

When you start racing there are a few important rules that you need to know.



Port - Starboard

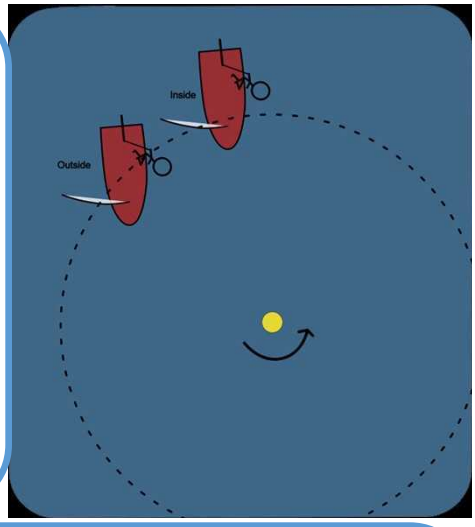
A boat on starboard has wind coming from the right hand side. While a boat on port has wind from the left side.

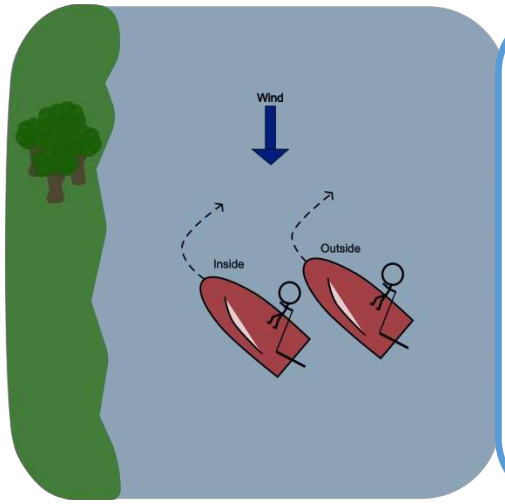
The starboard boat has right of way, and should shout "Starboard". So, the port boat must avoid a collision by either tacking or ducking behind them.

Mark Room

If two or more boats are overlapping with each other when they get within about three boat lengths of a mark then this rule will apply. Inside boat shouts "Room".

The outside boat must allow enough space for the inside boat to go around the mark (buoy) without hitting the mark or any other boats.



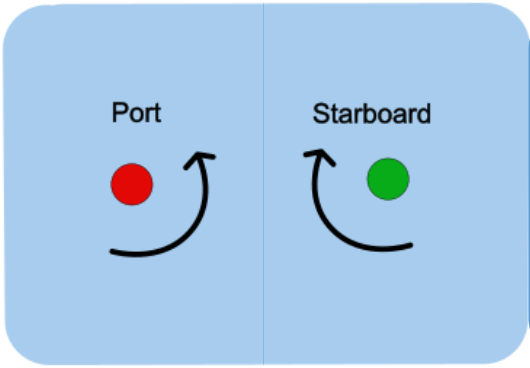


Room to Tack

If you are sailing towards an obstacle then you will need to tack. If tacking would mean you hit another boat then you must shout "Room to tack". This warns them to tack out of your way. You must give them enough time to avoid you before tacking, so think ahead about when you need to tack.

Racing

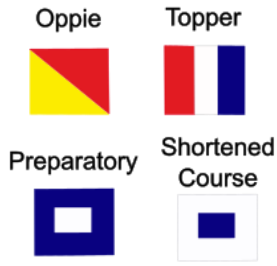
It might seem a little scary when you first start racing, but talk to people at your club and ask them for any advice. Remember you can retire from the race at anytime and that your position in the race does not actually matter.



Mark Rounding

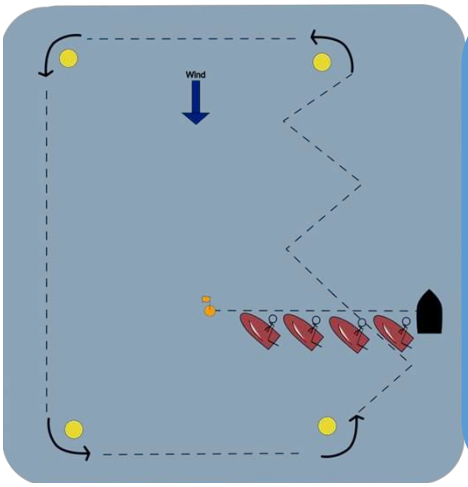
You will need to sail around a mark (buoy) in the correct direction. For a port rounding, keep the mark on your left. While for starboard, keep it on your right. Port is most common.

Start Sequence



Before the race starts there will be a series of sound signals and flags so that you know the time remaining before starting.

With 5 minutes remaining, the class flag goes up, either the Topper or Oppie (Optimists) flag. Then at 4 minutes a preparatory flag goes up, usually blue and white. At 1 minute this flag goes down again. At Go, the class flag goes down. The horn will sound at 10, 5, 4, 1, and 0 minutes. If the race is shortened, there will be a white and blue flag raised, you will finish at the end of the that lap.



Course

Every club uses a different course, so you should ask more experienced racers what to expect. A common course is a rectangular shape where you pass through the start line on every lap. The start line will usually be between a small orange buoy and a committee boat. You must stay downwind of the line until Go.

Glossary

Block - A small, wheel like system that the rope passes around to make it easier to pull to tight. These are mainly used on the mainsheet and kicker.

Boom - The horizontal metal pole that holds the bottom of the sail tight and clips onto the mast. The mainsheet will also attach to this.

Bow - The front half of the boat.

Cleat - There are multiple types of cleats, but they all work by gripping the rope to stop it from sliding. Cleats allow you to quickly adjust a rope and then leave it in that position.

Close-hauled - Point of sail, when you are sailing as close to the wind as possible with the sail pulled in to the corner of the boat.

Cunningham - See "Downhaul".

Daggerboard - The board in the centre of the boat that can be lifted up or down depending to the point of sail. It is used to prevent the boat from sliding sideways in the water.

Downhaul - The rope that is used to tighten the front edge of the sail, it connects to the base of the mast and the bottom corner of the sail.

Foils - The daggerboard and rudder set.

Kicker - The rope that connects the base of the mast and the boom. It tightens the back edge of the sail and will temporarily bend both the mast and boom on most boats.

Loop - When a rope is curved around and crossed over itself, a loop forms.

Mainsheet - Rope used to control how far out the sail is, connects the boom to the hull.

Mast - The vertical metal pole that holds up the sail and is slotted into a mast gate or mast thwart on the hull.

No-Go-Zone - The area where the wind is coming from and 45 degrees either side of it where you cannot sail towards. If you get stuck in this then your sail will flap in the middle of the boat.

Glossary - Continued

Outhaul - Rope used to tighten the bottom edge of the sail. Connects the end of the boom and the back corner of the sail.

Pulley - See "Block".

Reach - A point of sail, when you are sailing at approximately 90 degrees to the wind. The sail should be half way out and the daggerboard slightly up.

Rudder - The board at the back of the boat used to steer. It is controlled using the tiller and tiller extension.

Run - A point of sail, when the wind is behind you. The sail should be all the way out and the daggerboard raised.

Spars - The set of metal poles that support the sail, such as the mast, boom and sprit.

Sprit - The diagonal pole that supports the top corner of the sail on a Optimist. It connects halfway up the mast with the sprit halyard which adjusts the tension in the sail.

Standing Part - Section or end of a rope that is not involved when tying a knot.

Stern - The back of the boat's hull.

Tiller - The bar that is used to control the angle of the rudder and steer.

Tiller Extension - A lightweight bar that is connected to the end of the tiller with a flexible joint. This allows you to sit forwards or lean out of the boat and still be able to control the direction that you are sailing in.

Traveller - The rope at the back of a Topper that allows the mainsheet block to pass between the two sides of the boat without getting tangled with the tiller. It should always be tight and be over the top of the tiller.

Vang - See "Kicker".

Working End - The end of a rope that is actively being used to tie a knot. It will be passed under, over and through other sections of the rope.

Beginning Sailing: A Children's Guide to Optimists and Toppers

An informative and engaging introduction to sailing, tailored to children and young people interested in sailing Optimist and Topper dinghies. This book explores key concepts such as the parts of a boat, sailing techniques, useful knots, simple racing techniques, and important terminology. With clear explanations, detailed diagrams, and activity suggestions, it provides young sailors with the knowledge they need to start their sailing journey confidently. Perfect for adventurous minds ready to take their first steps into this exciting sport.

Suggested next reading:

- Pocket Guide to Boating Knots - Published by The Royal Yachting Association
- Optimist Handbook - Written by Alan Williams and Published by The Royal Yachting Association
- The Topper Book - Written by Dave Cockerill and John Caig and Published by Fernhurst Books