Cub Scouts on the water! The Bronze Boatman

May on the water resources

These resources are produced by the **Programme Team (Sea Scouting and Water Activities** to encourage everyone to learn about and get on the water this Summer!

Click on the Scout Shop logo above to order your Bronze Boatman badges!

What will we learn about this week??

We will learn lots of the parts of the Bronze Boatman badge.

Every Cub Scout in the country can get the coracle badge so why not add it to your Cub pack programme?

The Bronze Boatman badge!

Contents

The aspects of the Bronze Boatman badge covered in this resource are:

- Demonstrate and explain the uses of the following:
  - i. Reef knot
  - ii Round turn and two half hitches
  - iii. Figure of eight
- Find out what an anchor is
- Know the basic safety rules for swimming
- Using a compass, demonstrate:
  - i. Finding Magnetic North
  - ii. Set a map or chart
- Identify ten map symbols on an Ordnance Survey map or Admiralty chart of your local area, and explain their meaning
- Identify a position on a map or chart using a grid reference
- Know what a mast and rudder are
- Discover what a tide is

Not all elements of the badge are covered here as some are practical. Consult the Nautical Progress Scheme documents for more information.

The Reef Knot

A reef knot joins two ropes of ***equal*** thickness and is formed by tying a left-handed overhand knot and then a right-handed overhand knot, or vice versa.

It should ***not*** be used where life, limb or property may depend on it. A common mnemonic for this procedure is "right over left and under, left over right and under".

This is the knot on the World Scout Badge on your uniform.

Did you know?

A know which joins together two pieces of rope is called a bend. Do you know the names of any other types of bend?

The Round Turn and Two Half Hitches

The Round-turn-and two-half-hitches is used to tie a rope to a fixed object like to hitch a boat to a pole or bollard.

Pass the end around the post twice. This takes the strain while you tie the knot. Go around the standing end to make the first Half Hitch. Pull this tight.

Continue around in the same direction to make the second Half Hitch. Pull tight to complete the knot.

Did you know?

When you are using rope and stakes to make a boundary around your campsite, you should use a round turn and two half hitches on the first stake.

The Figure of Eight

The figure of eight knot is used as a stopper knot at the end of a rope to prevent the end passing through an eye or a pulley.

Stretch a length of the rope in front of you parallel to the ground and twist to form a loop, as though you are going to make an overhand knot.

Twist the loop an additional time, bring the end around and poke it through the loop. Pull to tighten and the finished knot should look like a figure eight.

Did you know?

You need to know this knot for Adventure Skills Sailing level 2, Rowing level 2 and Paddling level 3

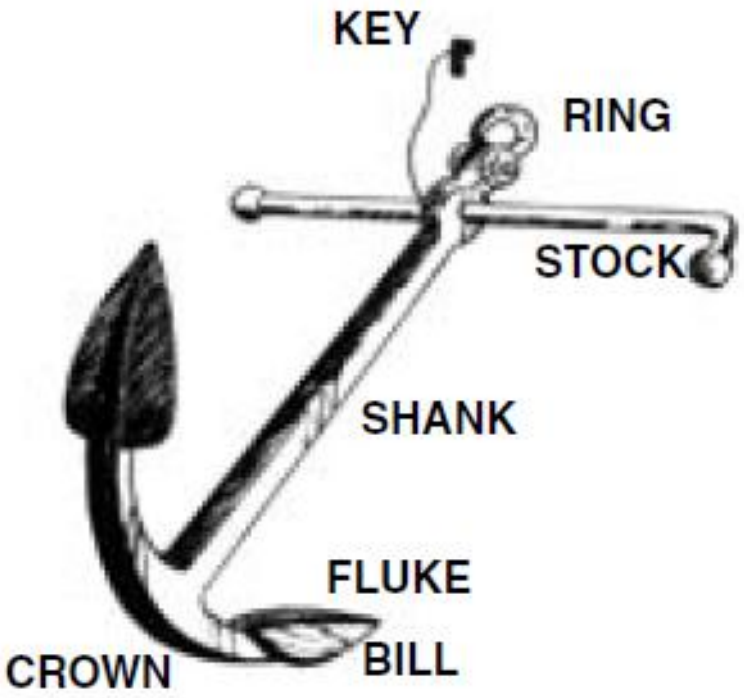
What is an anchor?

An anchor is used as a temporary mooring or to hold a boat in position in an emergency.

The nature of the sea bottom is important in anchoring as to how well it will hold your anchor. Mud gives the best hold. If you anchor regularly in the same ground you will probably have an anchor that is suitable.

The standard anchor is called the **Fisherman's Anchor** or **Admiralty Pattern**, which is useful in most circumstances for small boats.

You don't need to know the parts of an anchor yet, but see if you know any of them already from this picture.

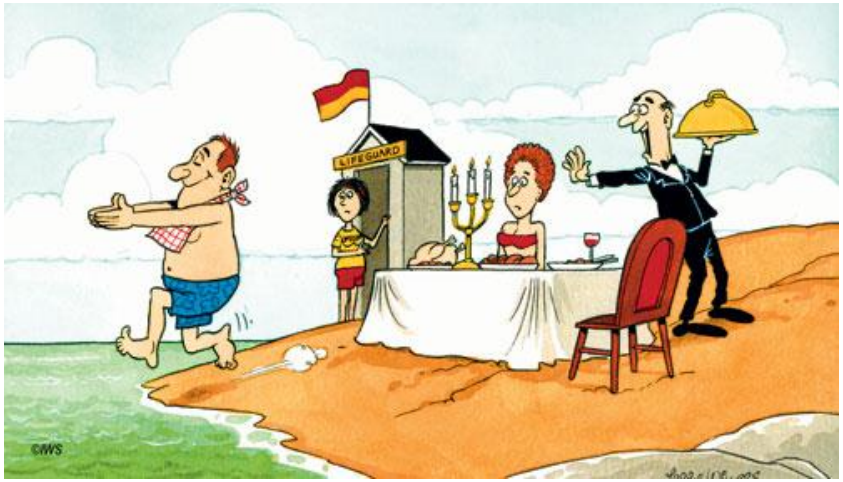


Know the basic safety rules for swimming

As a Cub Scout you should have a far better knowledge of safety while swimming than you did when you were a Beaver Scout.

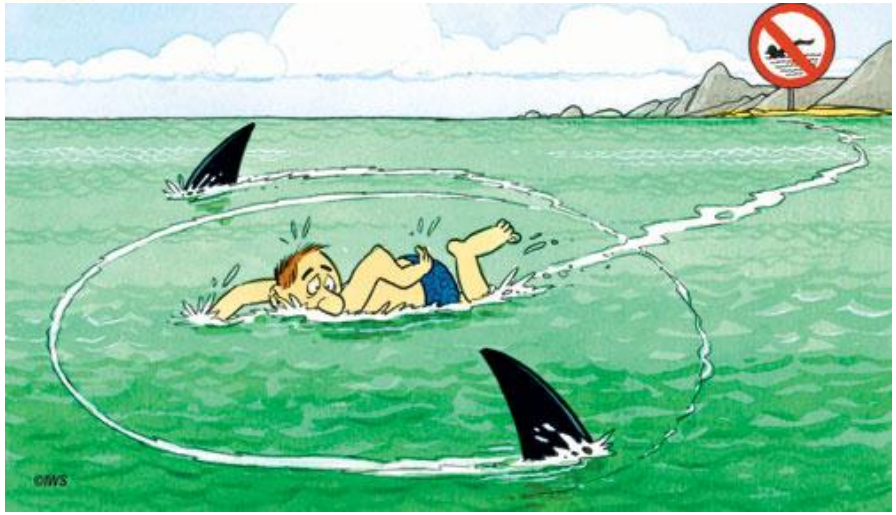
Here are your essential tips!

1 Never swim alone!

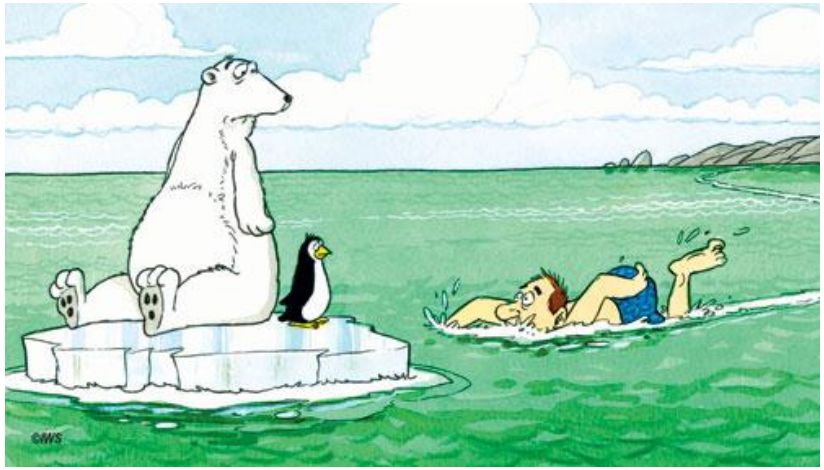


2 Don't swim after eating!

3 Don't swim if you are hot or tired!



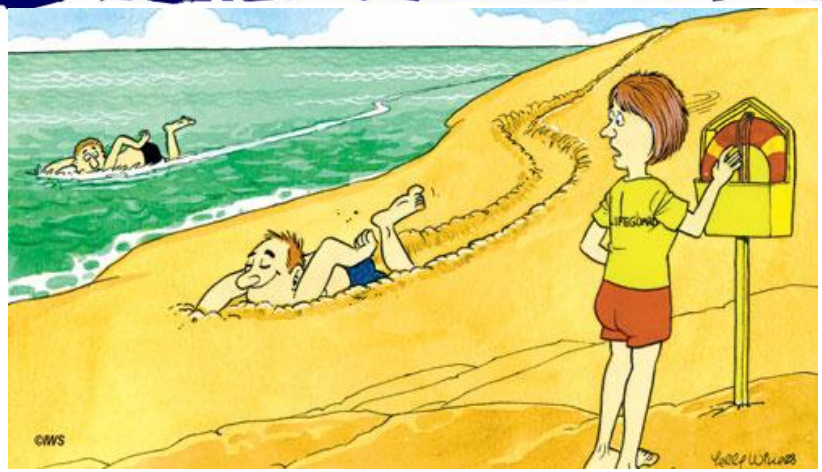
4 Don't swim in strange places!



5 Don't swim out to drifting objects

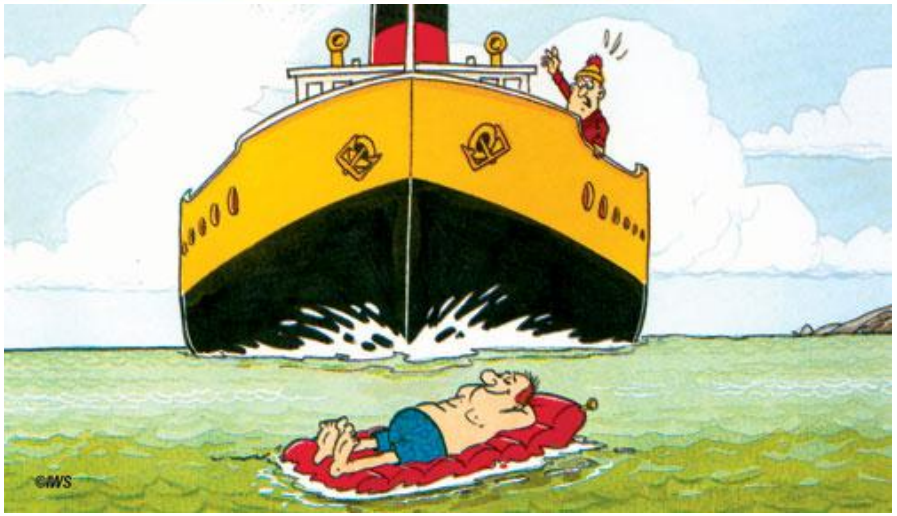
6 Come ashore if you feel cold

7 Don't swim away from the shore



8 *Always swim parallel to the shore!*

9 *Obey the lifeguard!*



10 *Do not use air mattresses!*

11 *Read the signs!*

12 Don't bully others

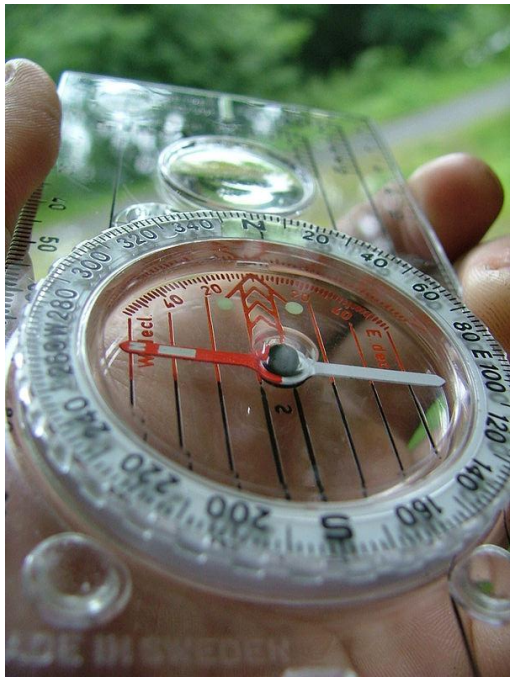
13 Learn to use your equipment before taking to the water!

Using a compass, demonstrate:

i. Finding Magnetic North

Using a map and a compass together is complicated by the slight difference between north at the top of the map and shown by the grid lines on the map (Grid North) and north indicated by the magnetic needle of the compass (Magnetic North) which points to an area of magnetism caused by the earth's rotation.

This difference is called the magnetic variation and varies from place to place as well as with time. It will be given on the map for that particular area.



On a standard SILVA type compass like this one, the red moving needle will always point to magnetic North. Remember to always hold your compass flat!

You will learn about the 3 different Norths in the Silver Boatman badge!

Using a compass, demonstrate:

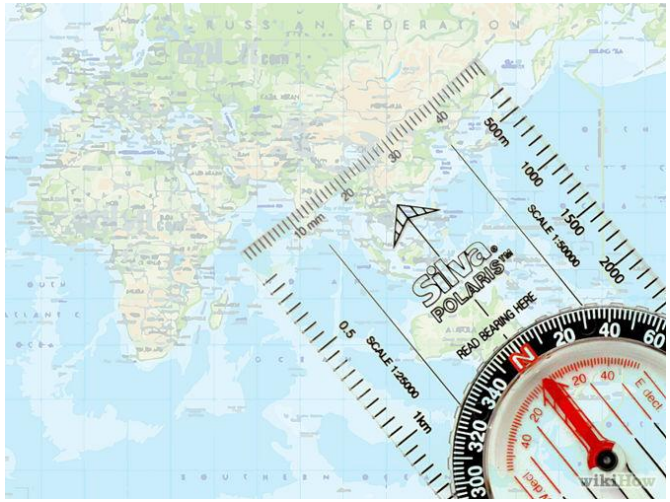
ii. How to set a map or chart

We set a map to help us relate the map to the terrain. It simply means turning the map around until it coincides with the world around you.

Where visibility is good it is easy to set a map by simply identifying points on the ground and on the map, then rotating the map until it matches around you.

In bad weather, using a compass is the only reliable way to set a map. It will make route finding and feature recognition easier.

To do this, simply place the compass on the map and, while holding it flat, turn both the compass and the map until the red end of the magnetic needle points to north on the map. The map is now set.

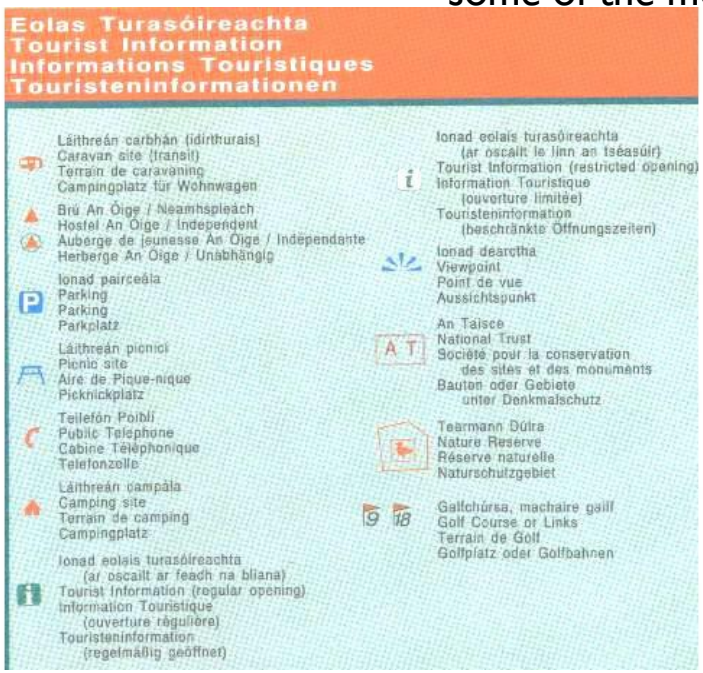


Placing the compass on the map

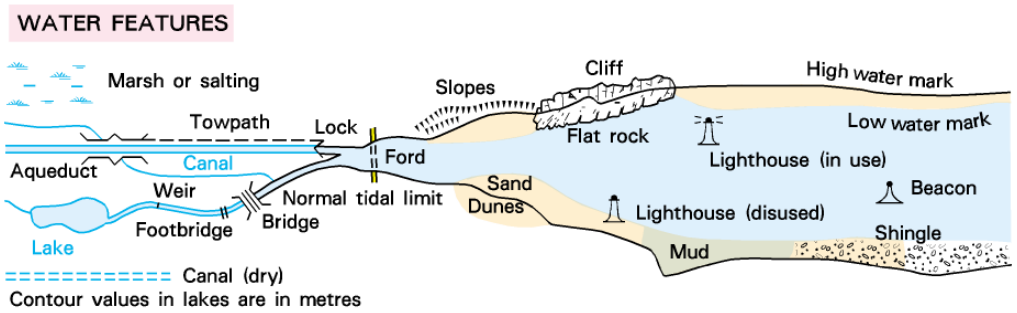
Aligning the lines on the map with the red needle

Identify ten map symbols on an Ordnance Survey map or Admiralty chart of your local area, and explain their meaning.

Different types of maps and charts use different symbols! Here we are going to show some examples and show you some of the more useful ones to you as a Cub Scout!



An example of symbols from an Irish Ordnance Survey map



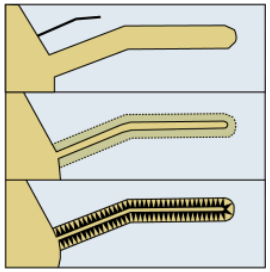
An example of water feature symbols on a UK Ordnance Survey map

Here some useful symbols from Admiralty Charts

Major light, minor light, lighthouse

A Lifeboat Station

Buildings


Breakwaters

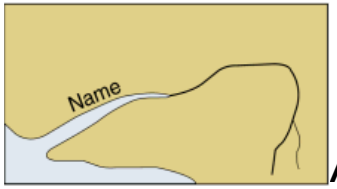
Marina

Anchorage

A rock which covers and uncovers

A Wreck, part of which is above the water

Triangulation Point



A River

Dangerous unwater rock of unknown depth

Time to test yourself! How many of these can you name?

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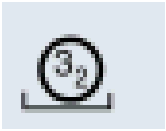

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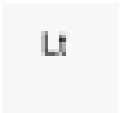

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Identify a position on a map or chart using a grid reference

A grid reference is a series of numbers (co-ordinates) which gives us the exact location on a map. It is created by using the grid lines which appear on OS maps using the following steps.

1. Pick a location on a map.

2. Find the grid letter on the national grid. These are printed in blue and are large in size. Quote the letter your location is.

3 .Start at the bottom left hand side of the map and move across the grid lines till you arrive at the grid line nearest your location. The number of the line is the first two numbers of your reference.

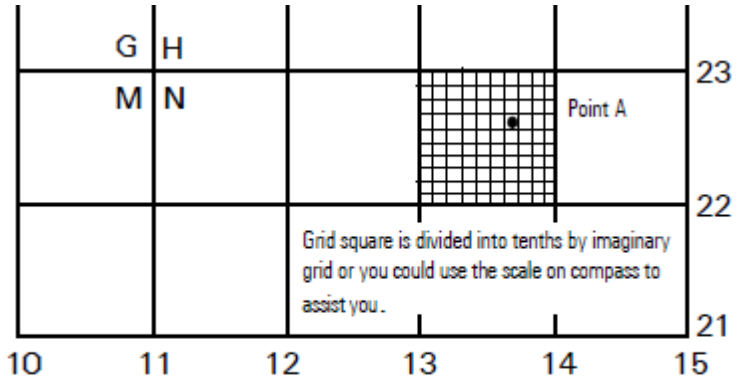
4. You should then divide up the grid square into tenths. Half way is .5, three quarter the way is .8 etc. This number is the third number of the reference.

5. Repeat the same steps for the grid lines that cross the map and this will give you the 3 figure reference for your location.

6. You now have your six figure reference for your position.

A simple rule of thumb is the phrase that states - 'go in the door and up the stairs'

Which means that if you visualise a door at the left hand side of the map - then you go in the door (give the bottom line first) then go up the stairs (give the side numbers next)



Grid reference for point A is N 137 227

Know what a mast is

The **mast** of a sailing boat is ***a tall spar***, or arrangement of spars which stand ***upright*** on the centre-line of a ship or boat. Its job is to carry sails and other spars.

It can also have navigation lights, a look-out position or signal lamps.

Large ships have several masts, with the size and configuration depending on the style of ship.

Spot the masts on these boats! Can you name any of the boat types?

Point out the rudder in each of these pictures

Know what a rudder is

A rudder is a device used to steer a ship or boat.

On a small boat, a tiller— a stick or pole acting as a lever arm—may be attached to the top of the rudder to allow it to be turned by a helmsman.

Simply, a rudder is a flat plane or sheet of material attached with hinges to the craft's stern.

In larger boats, cables or rods may be used to link rudders to steering wheels.

Discover what a tide is

By far the most important factor affecting the movement of water across the ocean is the tides.

Tides are great bulges of water caused by the gravity of the Moon and Sun. Attracted by gravity, these bulges move around the Earth's oceans, causing water levels to rise and fall. Typically water will rise for about six hours, followed by six hours of falling water depths.

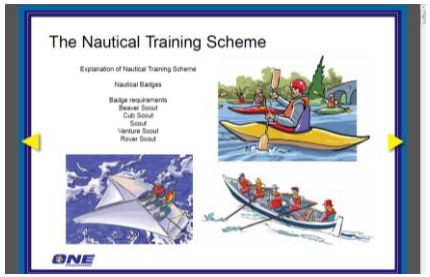
Why not get an expert to bring some tide tables to your meeting and explain how they help in boating?

The Moon and Sun govern the tide.

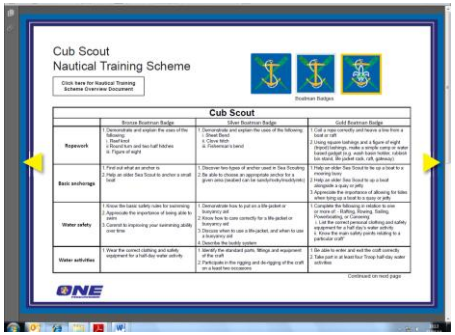
In the **Silver Boatman** you will learn the dangers posed by tidal currents when boating.

In the **Gold Boatman** you will discover the water cycle and other forces affecting the weather in your local area and get a weather forecast before going on boating activities.

Additional Resources

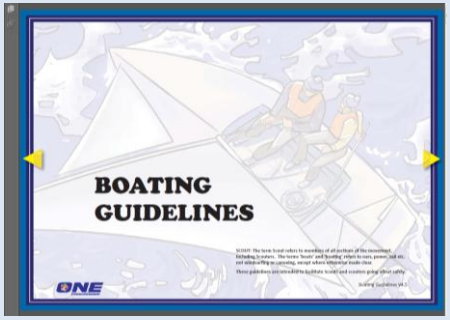


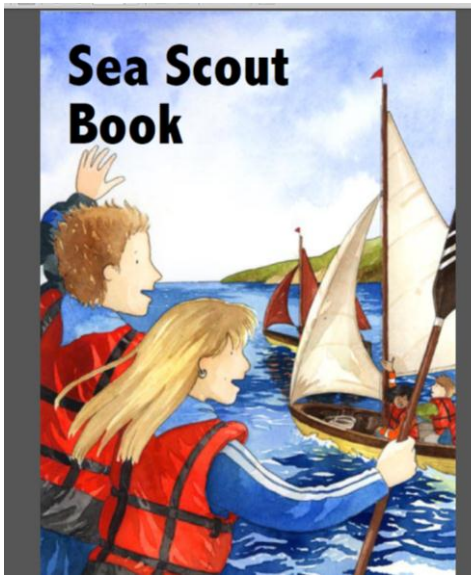
Nautical Training Scheme overview document



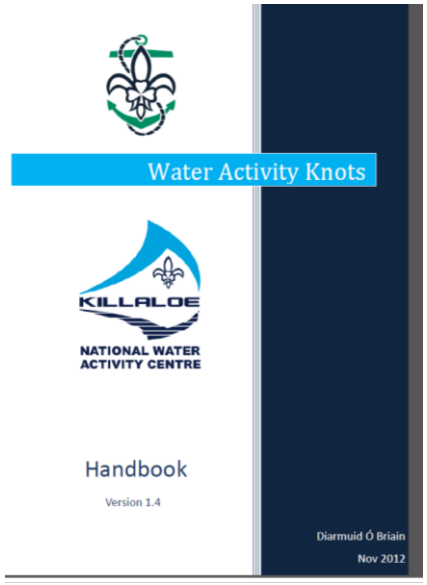
Nautical Training Scheme Cub section document

The Scouting Ireland Boating Guidelines – your safety bible!!





Sea Scout Book



National Water Activities Centre rope-work book