



Navigation staged badges

If you're looking for new things to learn whilst we are in self-isolation and practicing social distancing then the navigation staged badges might be a great place to start. Some scouts may have already earned some of the stages badges so start from where you left off. You might not be able to fully complete the badges whilst social distancing but when Scouts resumes you can show your leaders and tick off the remaining parts.

This may be useful for those also doing their DofE, Queens Scout Award and Explorer Belt and indeed any leaders looking towards their T1 Permit

There are 5 stages of the badge which you can start working towards at any age. You can find the badge criteria here: <https://members.scouts.org.uk/supportresources/4287/navigator-staged-activity-badge/?cat=7,64,780&moduleID=10>

Stage 1 must be completed before Stage 2 and so on

A IOM Government 1/25000 map is needed which can be bought in a newsagent and a compass would be useful and can be bought online

We have modified some of the activities to suit conditions, send your answers and photos of maps to me or any in the hills and mountain team for marking and we will then tell your leader

Stage One

Draw a map [a plan] of the largest room in your house marking the position of the door and window and any other features including a fire place, table, chairs etc. Try to draw to scale and mark North

Name 6 items of equipment you would take on a hill walk?

Name the 4 cardinal points of a compass.

With a piece of string and using the scale on the map measure the distance from Ramsey North Pier heading North to Blue Point?

Draw 6 symbols on a piece of paper taken from the map key and write down what they are? Take a look at this video from Steve Backshall <https://www.youtube.com/watch?v=o1NfYYkezys>

Name 3 long distance foot paths on the Isle of Man.

What are the 3 Norths?

What does pale yellow on the map represent?

What does dark green on the map represent?

What does pale green on the map represent?

Stage Two

Learn how to read a 4 figure grid reference, e.g. Sartfell is SC 3387, this is a 1 km sq

Check out these Steve Backshall video https://www.youtube.com/watch?v=c0du8v4EE_Y

Now work out the 4 figure grid ref for:

- Snafell Mast
- Beinn y Phott Cairn
- Windy Corner
- Greeba Mountain Cairn

Draw a map of your house, from the outside and garden showing the location of doors and windows, any paths, walls, fences, trees, gates, bird tables and invent your own symbols to indicate these features and make a key at the side of the map rather similar to the key on the map. Show North and try to draw to scale?

Learn the 8 points of the compass, 4 Cardinal and 4 half Cardinal

Know and understand the parts of a compass. Check out this Steve Backshall video <https://www.youtube.com/watch?v=5w4qKnfJww0>

Hold a compass in your hand and rotate yourself so that the red tip of the needle is in the red box of the base plate, you are now facing North

Stage 3

Learn how to read a 6 figure grid reference, eg Sartfell summit is SC 335 873 this is a 100 metre square. Check out this video from Steve Backshall https://www.youtube.com/watch?v=FXuo_ocVMVU

Now work out the 6 figure grid ref for:

- Snaefell Mast
- Beinn y Phott Cairn
- Greeba Mountain Cairn
- Car Park at the Point of Ayre
- Where you go to buy your shopping
- Where you go to school

Remember to prefix your grid ref with either SC or NX

Hold a compass in your hand and rotate yourself so that the red tip of the needle is in the red box of the base plate, you are now facing North, turn 180 degrees so the red tip is in South, you are now facing South and this is called a BACK BEARING

Hold the map and compass together and turn yourself and the map and compass until the red tip of the needle is in the red box. This is called setting the map. Check out this video <https://www.youtube.com/watch?v=rZd0RfsC-9I>

Understand how contour lines work (take a look at the below video) Put your hand flat onto the table and in ink draw 5 lines around your knuckle, now make a fist, this is how contour lines work. https://www.youtube.com/watch?v=4i_6eToM3X8

A contour line is a line drawn on the map that joins points of equal height above sea level

What is the spacing of contours on the map?

What is the thicker and 5th contour called?

When contours are close together this indicates a steep slope

When contours are further apart this indicates a gentle slope

What clothing material should you not wear on the hills? and why?

Stage 4 & 5

Contours

On the map identify the following to a 4-figure grid ref:

Give 2 examples of steep ground

Give 2 examples of flat ground

Identify on the map the following and give 6 figure grid ref:

A Spur

A Ring Contour

Wet/marshy ground

A Saddle

A deep gully

Pacing

When doing your daily exercise maybe where there is space e.g. a field or on the beach have a parent make a mark on the sand and ask them to walk normally and count 130 paces. This will be close to 100 metres and make another mark. When pacing we count double paces (see video below) so 100 metres would be about 65 adult paces. This can vary, uphill, downhill, height of person etc. Now you walk starting on the left foot and count 1 when you are back on your left foot and remember this number and recheck on the way back. This is a useful tool to help you navigate.

<https://www.youtube.com/watch?v=6EUKg1UXUZg>

If you are able now walk 300 metres [eg 3 times your pace for 100 metres and time yourself. At a usual pavement speed of 4 k/h it should take you 4.5 minutes which is another useful tool

Now, with your compass work out the following:

What is the distance of the foot path up South Barrule from grid ref SC 247 757 to the summit? What's the height gain? how long will it take? [assume 3k/hr]

Do exactly the same for Snaefell starting at the Bungalow and following the railway track to the summit

And again from Ballagilley grid ref SC 456 914 and straight up North Barrule to the summit, note contours and adjust speed

Note - at 4km/hr 100m should take 1.5 minutes, at 3km/hr 100m should take 2 minutes

Remember- add 1.5 minutes per 10 metres of ascent

Route map

Prepare a route map from the Bungalow to the summit of Snaefell, to the summit of North Barrule and to Ballagilley. This area is defined as Terrain 1 in Scouting thus would need to be supervised by a T1 permit holder
Mark on the map the following:

- Estimated Time of departure (ETD)
- Estimated time of arrival
- Hazards
- Bearing from Snaefell summit to The John Smythe Shelter
- ETA at Smythe Shelter
- ETA at Clagh Ouyr?
- Escape route?
- Height Gain?
- Weather, assume strong summit wind and showers
- What's in your back pack? and what size of back pack would be suitable for a day in the hills?

General things to find out

- What is Magnetic Variation?

- What is Remote Supervision?
- How do you find North from the stars?
- How do you find North from your watch [analog] and the sun?

2 further videos:

Magnetic North - <https://www.youtube.com/watch?v=oPwL0lrOdFA>

Choosing the right map <https://www.youtube.com/watch?v=xkzXYWdM9OE>

So, good luck

Let me know if you are stuck or there are quite a few leaders with permits that can help

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