

Map Making Skills

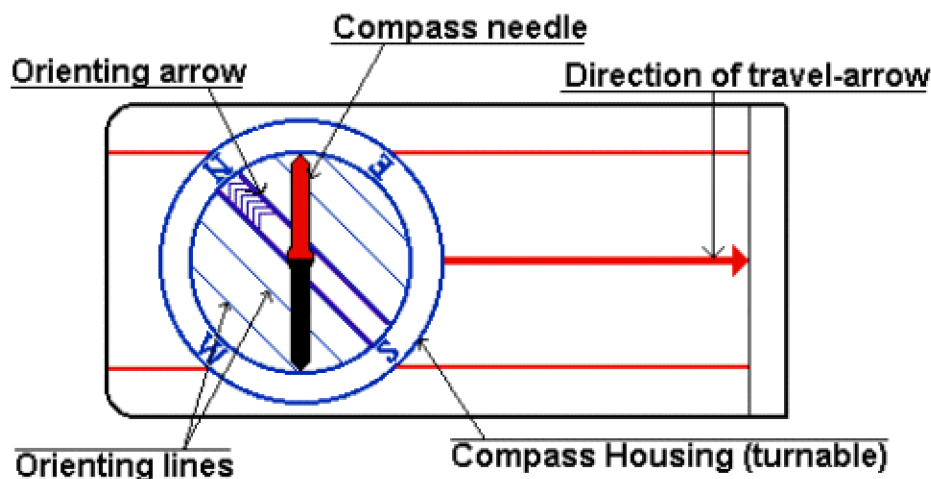
AIM: To map the features around the Rye Harbour Nature Reserve, measuring distances and directions from a known starting point.

Pacing out the distance:

- ◆ Over a known 10m distance, how many normal paces do you take? Do it at least 3 times to get an average.
- ◆ How many paces will you do over 100m and 250m?

Mapping the area:

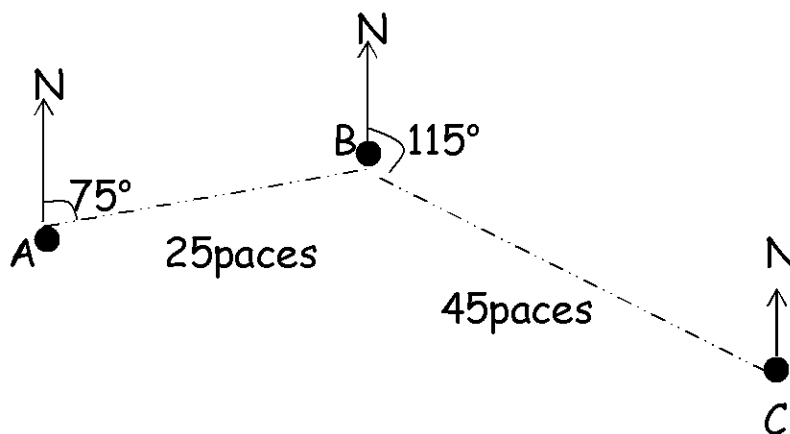
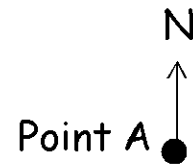
- ◆ By using a compass similar to the one below.



- ◆ The red and black arrow is called the *compass needle* (but it might be red and white on some compasses). **The red part of it is always pointing towards the earth's magnetic north pole.** This is your known point of reference.
- ◆ When standing at point A, turn the whole compass so that the *direction of travel-arrow* is pointing directly at point B, ensure that the compass remains level to allow the needle to turn correctly.
- ◆ Now whilst the compass is pointing at point B, rotate the *compass housing* to line up the *orienting arrow* with the red compass needle.
- ◆ To find out the degree difference that point B is from point A, read off the degrees that is shown being intersected by the *direction of travel arrow*.

Plotting your map onto paper:

- ◆ When marking point A on paper, ensure North is clearly labelled.
- ◆ After finding the degrees that point B is from Point A, place the compass directly over your marked point A, and align the *orienting arrow* with the known North on the paper (you can ignore the movement of the compass needle).
- ◆ Now place a mark in line with the end of the *direction of travel arrow*, so to connect point B with point A, join the two dots with a straight line.
- ◆ To calculate the correct distance that point A and B are apart, pace out the distance, then convert into metres.
- ◆ To mark point C on the map, stand at point B, and repeat the above steps. Remember to mark North on the map at each point (they should all be in the same direction!) and record degrees from north that each point are from each other.



MAP MAKING SKILLS

Please fill in the names of all the group members, and their total paces over the set distance of 10metres (take 3 measurements to get an average!)

Names	Paces in 10m			average	Paces in 100m	Paces in 250m

Please use the following as the points to plot on your map

Point	Location Name
A	Kiosk in Car Park / Martello Tower / Telephone Box
B	Gate to Reserve
C	Ditch under the Road
D	Lime Kiln Cottage
E	The Colin Green Bird Hide
F	The Red Roofed Hut
G	World War II Blockhouse
H	Bench on the corner
I	The 1 st Passing Place along the road
J	Passing Place along the road with concrete post
K	The Caravan on the Beach
L	The sign at the top of the shingle footpath
M	The Ray Parkes Bird Hide
N	The Bench outside the Bird Hide
O	Footpath Marker on sharp right hand turn
P	Sharp left hand bend on raised footpath near pond
Q	Bridge over River into Caravan Park
R	Join onto Road in Caravan Park
S	World War II Blockhouse
T	Martello Tower

When working out the degree that each point is from another, remember to always line up the north arrows before taking the degree reading off the compass.

Remember that some of the paces may need to be estimated due to not being able to measure accurately in a straight line between points.

Points	Degrees	Paces	Metres
A to B			
B to C			
C to D			
D to E			
E to F			
F to G			
G to H			
H to I			
I to J			
J to K			
K to L			
L to M			
M to N			
N to O			
O to P			
P to Q			
Q to R			
R to S			
S to T			