

DofE Training

Navigation and Breaks

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The 5 D's of Navigation

When navigating it is useful to use the 5 D's to help you plan each section

1. Dangers

Check that where you are about to go doesn't have any dangers

2. Direction

- What direction will you be going in?
- Use the compass to orientate the map
- You can check with your compass that the route matches the direction of the map
- For greater accuracy a bearing can be measured on the map

3. Distance

- You can measure the distance in millimetres and then multiply by the scale of the map:
 - 1mm on a 1:25,000 map is 25 metres
 - 1mm on a 1:50,000 map is 50 metres

- Compasses usually have a measure for 1 kilometre split into 100 metre parts but you need to ensure that you use the correct measure for the scale of map being used
- Find the measure where 1Km matches just one blue square on the map
- Sometimes 10 rather than 1Km is at the end (10 x 100 metres = 1,000 metres or 1 Km)
- You can then measure how many 100 metres there are between 2 points

4. Description

- Look for large features such as lochs and rivers that will be easy to spot as you proceed
- To improve the accuracy of knowing where you will be, look for smaller features such as a stream or building
- Use all these features to create a 'tick-off' list and a description of what you will do:
Go east along track for 400 metres
We will go past lochan
After the lochan walk for another 300 metres to building
Just after building take path going south
- Also include features that tell you that you have over-shot:
If we walk past the building and go too far we will come to a bridge

5. Duration

- Each blue square is 1 Km (1,000m) and will take about 20 minutes to walk carrying an expedition rucksack
- Measure the size of a square in millimetres to see how many millimetres you will walk in a minute
- If the blue square is 20mm wide and takes 20 minutes to walk then you'll walk about 1mm per minute
- If the blue square is 40mm and takes 20 minutes to walk then you'll walk about 2mm every minute

Factors for Duration

- Remember to adjust your timing estimate to take into account any uphill sections, how tired you are, how motivated you are
- If your pace is slower or faster than the route card then estimate from parts of the route that you have already completed how long the next section will take

Taking Breaks

Remember to plan for breaks. Short breaks count as part of your 'planned activity', (the time you must spend before reaching the campsite)

Safety

- Wherever you stop think about any dangers to you, such as traffic or on the bank of a fast moving river
- If you plan to cook during your break then consider any fire risks. Avoid areas with long vegetation or on top of dry leaves where a knocked stove could ignite them

Blisters

- If your feet or boots starting to rub then stop
- See if you need to adjust your socks, redo your laces or apply a plaster to stop the rubbing
- Don't put off checking your feet as the distance to the next break might be too far and you could develop a blister
- 'Prevention is better than cure'

When

- If you take a 2 minute break every 10 minutes you will find that you don't get into a 'rhythm'
- Planning to have a break after you complete a section of the route might provide motivation whilst doing that section

Where

- Having a view or being beside a stream can be more interesting

Weather

- On a windy day (especially if raining) a sheltered location inside woods without a view might be preferred

Making the Most of Breaks

Water

- Having access to a stream could allow you to top-up with water to save time later
- Remember to treat any water

Navigation

- If part of your route requires time to study the map then having a break before might allow more time to study the map without pressure from the group to want to keep moving

Getting Prepared

- Putting snacks into pockets or the side of your rucksack during a break makes them easier to get to and can save time later on as you won't need to take your rucksack off