

# St Christopher's CE High School



## Duke of Edinburgh's Award

### Expedition Handbook

Name \_\_\_\_\_

Award Level \_\_\_\_\_





# The 20 Conditions of the Expedition section

DofE qualifying expedition conditions		
Planning the expedition	1	The team must plan and organise the expedition; all members of the team should be able to describe the role they have played in the planning.
	2	The expedition must have an aim. The aim can be set by the Leader at Bronze level only.
	3	All participants must be within the qualifying age of the programme level and at the same Award level (i.e. not have completed the same or higher level of expedition).
	4	There must be between four and seven participants in a team (eight for modes of travel which have a tandem).
	5	The expedition should take place in the recommended environment. <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid orange; padding: 5px; width: 30%;"> <b>Bronze:</b> Expeditions should be in normal rural countryside – familiar and local to groups.         </div> <div style="border: 1px solid grey; padding: 5px; width: 30%;"> <b>Silver:</b> Expeditions should be in normal rural, open countryside or forest – unfamiliar to groups.         </div> <div style="border: 1px solid yellow; padding: 5px; width: 30%;"> <b>Gold:</b> Expeditions should be in wild country (remote from habitation) which is unfamiliar to groups.         </div> </div>
	6	Accommodation must be by camping or other simple self-catering accommodation (e.g. camping barns or bunkhouses).
	7	The expedition must be of the correct duration and meet the minimum hours of planned activity. <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid orange; padding: 5px; width: 30%;"> <b>Bronze:</b> A minimum of 2 days, 1 night, 6 hours planned activity each day.         </div> <div style="border: 1px solid grey; padding: 5px; width: 30%;"> <b>Silver:</b> A minimum of 3 days, 2 nights, 7 hours planned activity each day.         </div> <div style="border: 1px solid yellow; padding: 5px; width: 30%;"> <b>Gold:</b> A minimum of 4 days, 3 nights, 8 hours planned activity each day.         </div> </div>
	8	All expeditions must be supervised by an adult (the Expedition Supervisor) who is able to accept responsibility for the safety of the team.
	9	Assessment must be by an accredited Assessor. At Bronze level only, the Assessor may also be the Expedition Supervisor.
	10	Expeditions will usually take place between the end of March and the end of October. They may take place outside this period, if so, non-camping accommodations options should be considered.
Training and practice	11	The expedition must be of the correct duration and meet the minimum hours of planned activity. <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border: 1px solid orange; padding: 5px; width: 30%;"> <b>Bronze:</b> Teams must complete the required training.         </div> <div style="border: 1px solid grey; padding: 5px; width: 30%;"> <b>Silver:</b> Teams must complete the required training and a practice expedition of a minimum 2 days, 2 nights.         </div> <div style="border: 1px solid yellow; padding: 5px; width: 30%;"> <b>Gold:</b> Teams must complete the required training and a practice expedition of a minimum 2 days, 2 nights.         </div> </div>
During the expedition	12	All expeditions must be by the participants' own physical effort, without motorised or outside assistance. Mobility aids may be used where appropriate to the needs of the participant.
	13	All expeditions must be unaccompanied and self-sufficient. The team must be properly equipped, and supervision must be carried out remotely.
	14	Teams must possess the necessary physical fitness, first aid and expedition skills required to complete their expedition safely.
	15	Groups must adhere to a mobile phone use policy as agreed with the Expedition Supervisor and Assessor. This agreement should also include use of other electronic equipment.
	16	Participants must behave responsibly with respect for their team members, Leaders, the public and animals.
	17	Groups must understand and adhere to the Countryside/Scottish Outdoor Access, Highway and Water Sports Codes (as appropriate).
	18	Participants must plan an appropriate expedition menu, including cooking and eating a substantial hot meal on each day. This is optional on the final day.
Post expedition	19	Participants must actively participate in a debrief with their Assessor at the end of the expedition.
	20	At Silver and Gold level, a presentation must be prepared and delivered after the expedition.

# Observing The Countryside Code

## Access





You do not have the right to cross any land except by public rights of way which are marked on Ordnance Survey maps thus:

PUBLIC RIGHTS OF WAY	
	Footpath
	Bridleway
	Byway open to all traffic
	Restricted byway

**The representation on this map of any other road, track or path is no evidence of the existence of a right of way**

From 2nd May 2006 roads used as public paths were redesignated as restricted byways. They provide a right of way for walkers, horse riders, cyclists and other non-mechanically propelled vehicles

OTHER PUBLIC ACCESS	
	Other routes with public access
	Recreational route
	National Trail
	Long Distance Route

National Parks have been designed to protect areas of beautiful scenery. They are usually privately owned. Access to rough hill and mountain land is usually tolerated by hill farmers (as long as you observe The Country Code) but you must get permission to cross cultivated or enclosed land. Otherwise keep to the public footpaths. Details can be obtained from the particular National Park office or information centres. Park boundaries are shown on OS maps.

## The Countryside Code

Respect. Protect. Enjoy.

### **Respect** other people

- Consider the local community and other people enjoying the outdoors
- Leave gates and property as you find them and follow paths unless wider access is available

### **Protect** the natural environment

- Leave no trace of your visit and take your litter home
- Keep dogs under effective control

### **Enjoy** the outdoors

- Plan ahead and be prepared
- Follow advice and local signs

# Route Planning:

## 4-Figure Grid References

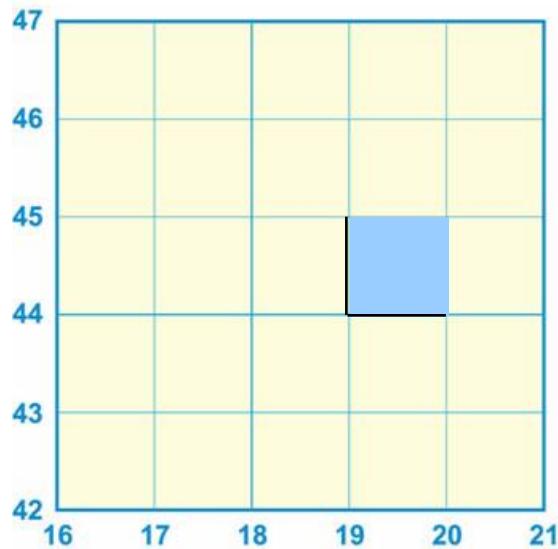
Grid references give the location of a place on a map. There are two types:

**4-figure grid references** and **6-figure grid references**. The latter is more specific, it gives the exact location of a place, whereas 4-figure grid references only give the grid square where the place is located.

### 4-Figure Grid References

- 4-figure grid references give the numbers of the lines which meet at the bottom left corner of the grid square.

You always read the number along bottom of the map first (the vertical lines), then the number on the left (the horizontal lines). A way of remembering this is that you always go along the corridors first, then up the stairs.



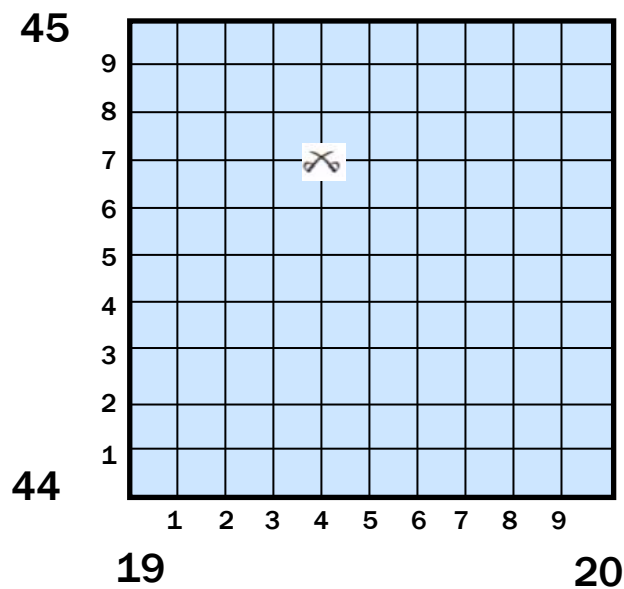
The 4-figure grid reference for the blue shaded square is:

19 44

# Route Planning: 6-Figure Grid References

## 6-Figure Grid References

- 6-figure grid references have six numbers, four are the numbers you already know (the 4-figure grid reference of the bottom left corner of the grid square). The 'missing' numbers you must find out are the 3<sup>rd</sup> and 6<sup>th</sup> in the sequence.  
e.g. **19** \_\_ **44** \_\_
- To do this, you must imagine that each square is further sub-divided into 10 smaller sections, between the main grid lines. You get the 'missing' third number by counting these smaller sections between the main lines.
- REMEMBER - You always read the number along bottom first (the vertical lines – along the corridors), then the number on the left (the horizontal lines – up the stairs).



So the 6-figure grid reference of the Battle Site (✂) is **194 447**

# Route Planning: Calculating Time Taken

How long your expedition takes will depend on many factors. Through years of experience, this particular time rule provides a suitable equation for the Duke of Edinburgh's Award Expedition.

**The Time Rule being:** Allow 1 hour for every 3 kilometres  
plus  
1 hour for every 300 metres climbed

## Conversion Table

Distance (kilometres)	Minutes	Height Climbed (metres)
0.1	2	10
0.2	4	20
0.3	6	30
0.4	8	40
0.5	10	50
0.6	12	60
0.7	14	70
0.8	16	80
0.9	18	90
1.0	20	100
1.5	30	150
2.0	40	200
2.5	50	250
3.0	60	300

# Route Planning: Calculating Height Climbed

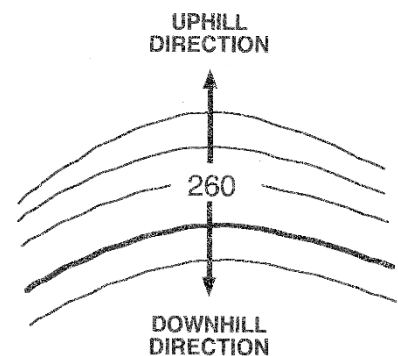
The height, shape and steepness of the ground is shown on a map by means of contour patterns. Understanding these patterns will enable you to:

1. Find the height of a place.
2. Appreciate the steepness of a slope.
3. Recognise major land forms, such as a hill, valley, spur, ridge and high and low ground.

## **Contours**

A contour is a line drawn on a map joining all the points that are the same height above sea level. (Printed in orange on OS maps). The contours are printed at 10 metre intervals and in lowland areas, 5 metre intervals.

The number on the contour indicates its height and also the direction of the slope.



## **Steepness**

The steepness of a slope is indicated by the spacing of the contours. Widely spaced contours indicate that the going is not too bad. Close contours mean a steep climb.



# Navigation:

## Setting a Map

Orientation of yourself and your map is a key skill in navigation. You can generally orientate your map using landmarks.

It is useful to always apply the following three rules of orientation:

1. Don't set off on your route until your map is orientated.
2. Every time you read the map, ensure that it is orientated.
3. Every time you stop on the route, orientate your map and update your position.

There are two main ways of **orientating your map**:

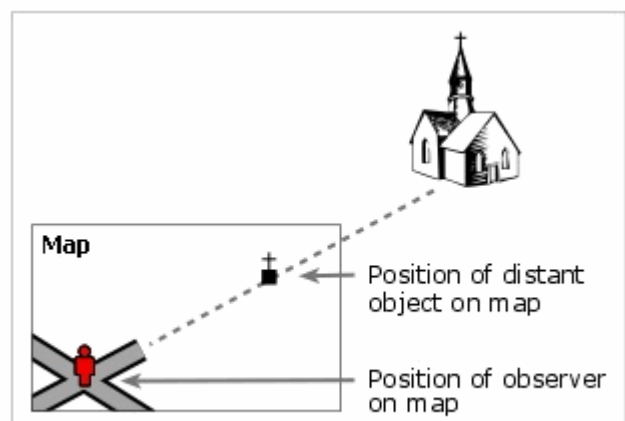
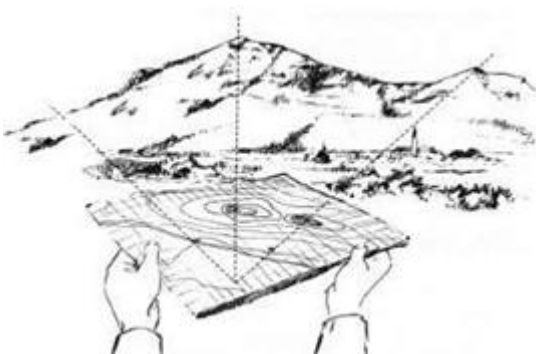
### 1. Using line features

- a. Look around you for a linear feature such as a road, wall, path – anything which has length and direction and is also marked on your map.
- b. Hold the map level and turn it until the feature on the map is parallel to the feature on the landscape.

The map should now be correctly orientated with all the landmarks and features in the correct direction on the map. This method is simple and effective and you only need to have a rough idea of your location.

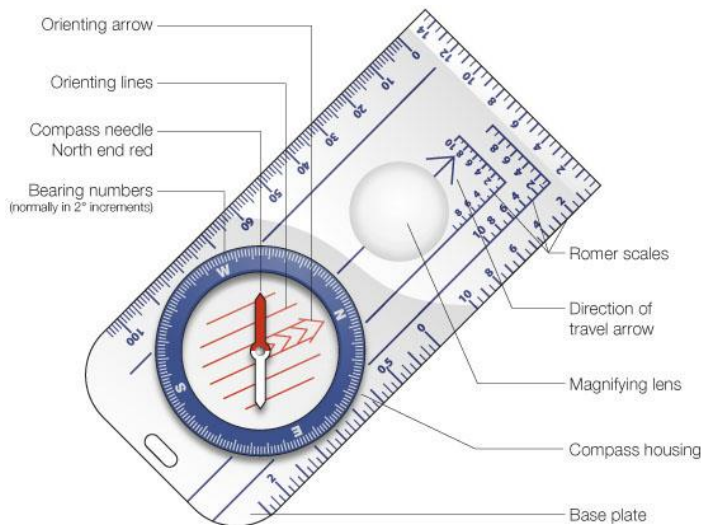
### 2. Using landmarks or spot features

- a. Look around the landscape and identify a spot feature which is marked on the map.
- b. Lay a pencil or straight edge through your position on the map and then, holding the map level, turn the whole map around until you can sight the spot feature along the straight edge from your position on the map.





# Navigation: Compass Skills



When you venture into the vastness of the countryside, your one true companion will be a map. And your map will only be a sure guide if you are able use a compass to identify your position and the direction you intend to walk.

## ***Taking a compass bearing***

### **Step 1**

Find the two points on the map that you want to travel from and two. Line up your compass edge between the two points, so that your *direction of travel arrow* is pointing TO your destination.

### **Step 2**

Rotate the *compass housing* until the red *orienting arrow* in the centre is pointing to the top of your map and the red lines are parallel to the grid lines on the map.

### **Step 3**

To travel in the correct direction, you must now turn the whole compass so that the north (red) end of the *compass needle* points in the same direction as the *orienting arrow* (red in the shed).

To help you stay on track, it's important to take regular compass bearings during your journey. Wherever possible, try and divide your journey up into short sections, taking new bearings along the way. If you continue in the wrong direction or on an incorrect bearing for too long, you will end up far from where you want to be.

# What must the well dressed Fell Walker wear?

## RUCKSACK

This should contain:-

Kagoul  
Packed Lunch  
Extra clothing - Gloves, Socks, etc.  
Emergency food & First Aid  
Small plastic drinks bottle  
(NEVER use a glass bottle)  
Small towel to use as a sweat cloth,  
or a scarf, or even as a small towel.  
Money  
Torch  
Polybag (Giant size)

## HAT

or hair or both.

## WARM UNDERWEAR

String vest. Shirt and long sleeved  
woollen pulley or track suit top.

## WINDPROOF ANORAK

with a hood, long enough to sit on  
and with good long sleeves with no  
gaps for the wind to get in.

Map, Compass, Whistle, Route card

## GLOVES OR MITTENS

Tight cuff to keep out wind.

## TROUSERS

Cord, Woollen or Flannel.

NOT Jeans. They retain no heat  
when wet.

## LONG (FOOTBALL) SOCKS

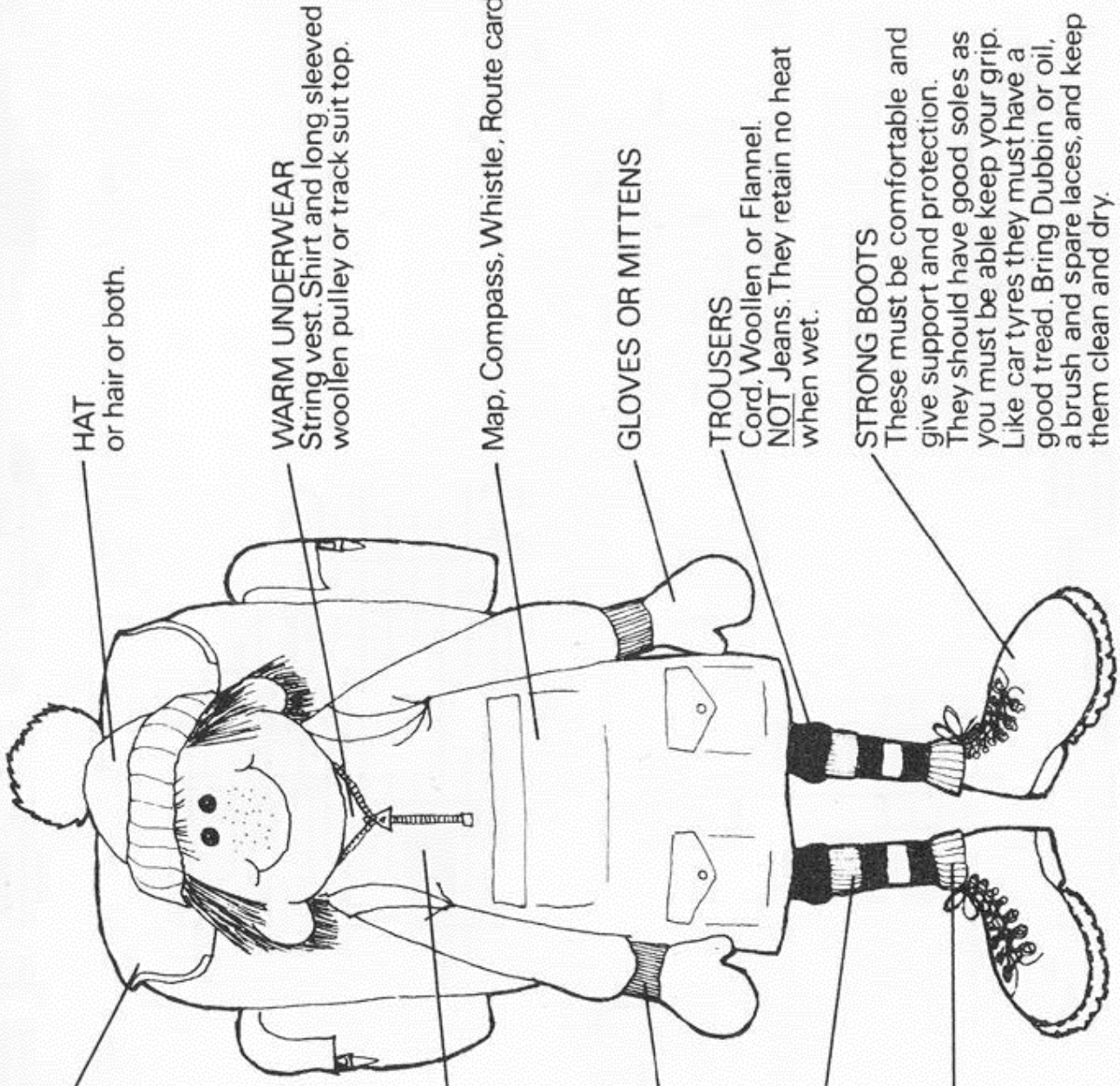
to turn trousers into breeches and  
protect legs.

## STRONG BOOTS

These must be comfortable and  
give support and protection.

**THICK WOOLLEN SOCKS**  
(Thin nylon socks can be both  
painful and dangerous)  
Spare pairs required.

They should have good soles as  
you must be able keep your grip.  
Like car tyres they must have a  
good tread. Bring Dubbin or oil,  
a brush and spare laces, and keep  
them clean and dry.



# Suggested Kit List

Equipment items can be grouped into four categories:

1. Personal Clothing
3. Personal Camping Equipment

2. Personal & Emergency Equipment
4. Shared Camping Equipment

## Personal Clothing

Walking Boots (broken in)  
Walking Socks  
Thermal Tops / T-shirts  
Sweaters (woollen or fleece)  
Walking Trousers (lightweight & warm)  
Underwear  
Flip Flops / Trainers (optional)  
Gloves (woollen)  
Hat (warm or sunhat)  
Waterproof Overtrousers  
Cagoule / Coat (waterproof & windproof)

## Personal Camping Equipment

Large Rucksack (65 litre capacity)\*  
Strong, large bin bags (to line your rucksack)  
Sleeping mat\*  
Sleeping bag (in a waterproof bag)\*  
Sleeping bag inner (optional)\*  
Knife, fork, spoon or Spork  
Plate/bowl  
Mug

## Personal & Emergency Equipment

Personal First Aid Kit\*  
Small Torch & spare battery  
Wash Kit (small)  
Emergency food rations\*\*  
Water Bottle  
Food & Snacks

## Shared Camping Equipment

Lightweight 2-3 person tents\*  
Trangia stoves\*  
Maps, cases & route cards\*  
Compasses\*  
Scourers  
Tea Towels  
Sun Cream (if appropriate)  
Matches (in a dry container or bag) / Lighter

\*Provided by school

\*\*Every participant needs to carry emergency food rations. It does not have to be much (particularly at Bronze) but it is an essential part of preparing for the Expedition.

A good ration pack should include a favourite high energy snack (Snickers and Mars bars work well or, in hot weather, Kendal Mint Cake), sweets (such as Haribo, wine gums, fruit pastilles, raw jelly cubes etc.), energy drink powder/hot chocolate sachets and a substantial filling snack like a flapjack. Keep it all in a waterproof bag or container.

# Packing your Rucksack

Pack your rucksack in the order you will need to access things.

- Line your whole rucksack with a black bin liner to keep things dry. Sleeping bag goes in first, into the very bottom compartment. Then use your rollmat inside the rucksack as an extra layer of padding and waterproofing.
- Next put in your clothes, food for dinner and breakfast and your parts of the tent and Trangia, remembering to avoid having any sharp objects sticking in your back whilst walking.
- Finally pack your waterproofs, First Aid kit and lunch in the top compartment, so that you can access them quickly.

Use the outside pockets for items you may want to reach whilst walking such as water, snacks, personal medication, sun cream etc.



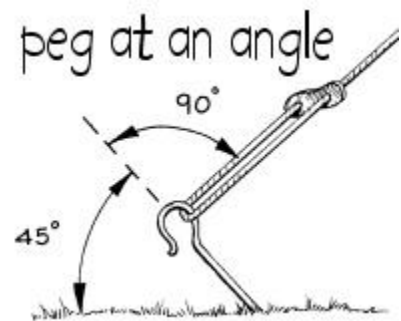
## ***Putting on a loaded rucksack***

1. Release all the straps before putting on your rucksack.
2. Don't just try and swing it up onto your back. Bend your legs so they can take the strain. If possible, rest the rucksack on a wall or have someone hold it while you adjust the straps.
3. Tighten the waist belt first. This should sit around the belly button (waist) for girls and on the hips for boys.
4. Finally tighten the shoulder straps.

# Siting and Pitching a Tent

## **Things to do:**

- Look for a spot that is fairly flat, or just on a slight incline.
- Remove any sharp objects from the ground.
- Pitch the back of the tent into the wind, so the door is facing away from the wind direction.
- Pitch the back of the tent slightly more uphill and sleep with your feet towards the door, so your head is slightly above your feet.
- Pitch the tent with the zips closed.
- Drive the pegs into the ground at an angle, towards the tent.



## **Things NOT to do:**

- DON'T pitch your tent under a tree – the big drops of rain that accumulate can cause a heavier downpour that may get through the tent. They also drip long after it has stopped raining and may drop sticky sap onto your tent.
- DON'T pitch on a flat lowland – if there is a heavy rain, the lowland will act as a pond.
- DON'T pitch sideways on a slope – you may end up rolling downhill in the night.
- DON'T pitch your tent sideways on to the wind – the tent flaps will flap about and cause a disturbance.

## **Condensation and Leaking:**

Condensation can occur in all tents and should not be confused with leaking.

The most effective method of avoiding leaking is to firmly peg out the tent's guy ropes and ensure there is a clear gap between the inner and outer sections of the tent.

# The use of a Trangia Stove

A Trangia is a storm-proof system based on simplicity: Two windshields that fit together, a burner, a couple of pans, a combined lid/frying pan and a handle. The stoves are lightweight. They need no special care and they are impact resistant. The Trangia stove is reliable in all weather conditions, all year round, without unnecessary parts that can go wrong or be adversely affected by cold, for example. The stove is quick to set up, and packs into a compact unit that takes up minimal space.



1. Start by removing the strap, loosen the buckle and undo the strap.
2. Take off the lid/frying pan.
3. Take out the saucepans.
4. Turn the lower windshield over and place it on a flat surface with the small burner hole facing upwards. Turn the small holes in the windshield towards the wind to prevent too much draft.

Wind direction



5. Take out the burner and remove the lid and the simmering ring. You can regulate the heat by adjusting the flame, using the damper.

6. Fill the burner about two-thirds with fuel and place it in the lower windshield.
7. Place the upper windshield on top of the lower and secure them using the bayonet joint. You can now light the burner.

Always use the pan handle to hold pans safely and avoid burns.





## The use of a Trangia Stove

- Close the lid of the fuel bottle and place it well away from the Trangia. Also, the person who filled the burner should not light it, in case of any fuel being spilled on your hands.
- NEVER try to blow out the flame. When you have finished cooking, close the damper and place the simmering ring over the flame to extinguish it.
- When the burner has cooled, tip out any remaining fuel so that it doesn't leak into the pans. There is no need to wash the burner.
- Do not replace the lid until the burner has cooled down, to avoid melting the rubber seal.
- Pans must be washed and dried thoroughly before re-assembling the Trangia and securing the strap.

### *Menu Planning*

Getting your food right can really make a big difference to how much you enjoy your DofE expedition. You'll need to design a menu which packs in as much energy (calories) into the least weight and volume as possible.

**Breakfast:** This might include cereal, muesli, porridge or even a full English. You can buy readymade breakfast pouches which are great for starting the day.

**Lunch:** Opt for foods that don't need to be heated or kept chilled. This might be sandwiches, pitta bread or wraps with other high energy foods like flapjacks, cereal bars, nuts, dried fruit, biscuits, chocolate bars, dried sweets, jelly, mint cake etc.

**Evening Meal:** Almost every team chooses to cook their substantial meal at the campsite. Soup, curry, stews, pasta, bangers and smash or noodle stir-fry are all great expedition meals and you can follow them up with a hot or cold pudding like hot chocolate cake or crumble and custard.



# Safety & Emergency Procedures

## **1. Getting Lost**

Even the most experienced navigators and walkers can occasionally get lost. The best way to avoid this is by being thoroughly competent with a map and compass. Always observe the ground carefully as you cross it and keep a constant check on your route and position. Careful route planning helps.

## **2. Bad Weather**

Pay attention to weather forecasts. Carry spare clothes and waterproofs and be prepared for any possible conditions.

## **3. Benightment**

Always carry a torch and spare batteries. Make sure you arrive in camp before dark. If you are not, STOP and THINK. If the ground is safe and navigation is straightforward, move slowly to the nearest road or house using your torch.

## **4. Exposure**

Exposure, or hypothermia is severe chilling of the surface of the body leading to a progressive fall in body temperature, which can be fatal if left un-checked. Exposure can be avoided by not getting exhausted, too cold or too wet.

## **5. Accidents**

Carry a First Aid kit and know how to use it. Keep on safe ground and behave sensibly. If a serious accident occurs, follow the stages of Emergency Procedure, outlined below.

### ***Immediate Emergency Aid***

Stay calm, treat injuries, seek or make shelter, assess situation needs.

### ***Attracting Attention***

#### ***The International Distress Signal***

For help: Six blasts of the whistle, wait one minute and repeat.

For answering: Three long blasts of the whistle, wait one minute and repeat.

### ***Getting Help***

Best navigator, plus one other, each with own emergency equipment, head for the nearest phone with written information.

### ***Emergency Message***

Grid reference position and place name. Number of casualties. Type of injuries. Time of accident.

### ***Waiting for Help to Arrive***

Erect a tent, keep warm with sleeping bags, hot drinks etc. Mark ground with Bivvy and look out for help arriving.