

# BASICS: indoors

By Steve Long



Jamie Goodwin bouldering on the woodie, The Edge, Sheffield. All photos credit: Nick Smith

**C**limbing can be enjoyed on many levels. At its most spontaneous and basic, just footwear is required. On the other hand, in cold and remote locations a range of equipment and clothing is essential just for survival. It's difficult separating the essentials from the luxuries, and impartial advice is hard to find.

Which is why we're running a four-part series on learning to climb, your guide to the early learning stages of this mysterious and varied world. Here in part one we tackle indoor walls, then later issues will cover the progression onto crags and mountains, basking in summer sun and wrapping up for the ephemeral delights of winter climbing, at home and further abroad.

## Climbing Walls

Not that long ago, most people took their first tentative climbing steps on real rock, but these days it's much more likely to be on an indoor wall. Artificial climbing walls have seen an enormous surge in popularity over the last few decades, and have improved beyond all recognition from the early basic efforts. Now there are few towns in the UK that don't have a wall, making them a very accessible place to start.

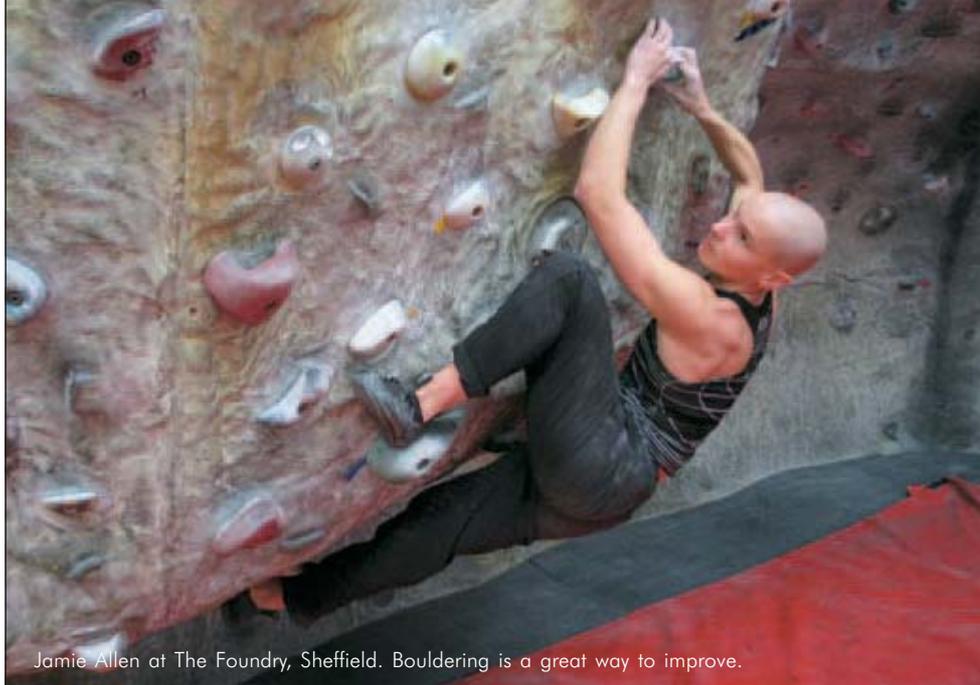
Most large walls run introductory taster sessions, with all equipment provided. These are by far the best way to start out, since they will familiarise you with the skills and risks involved. In fact if you're a complete beginner most walls won't even let you in until you've taken such a course. It'd be great to just turn up and start climbing, but they cannot run the risk of novice climbers making serious mistakes. The better of these courses will also include an element of coaching and an awareness of how indoor climbing relates to the outdoors.

This will usually be picked up when you fill in the registration form on your first visit. The purpose of this form is to both make you aware of the risks involved, and to alert the wall to your level of skill, so don't be tempted to bend the truth. If you don't know how to belay, admit it now!

Under 18's not on an organised course will have a few more stages to go through. On BMC recommendations, 16-17 year olds should have to pass a basic competency test, 14-15 year olds should have this test plus a parental visit, and under 14's are only usually admitted at the manager's discretion. OK, now that you're through the door, what can you expect to see? These days most walls feature a mix of roped climbing and bouldering. What do you need for these?

## Bouldering

Bouldering is a distillation of climbing movement; cutting out the rope-work and paraphernalia to tackle “problems” no more than a few metres above the ground. Outdoors this takes place, unsurprisingly, on boulders, and indoors cunning wall designers have pulled out all the stops to mimic the natural world; steep walls, slabs, roofs, caves, arches, all preferably with some good padding underneath. Some dismiss bouldering as not “real” climbing, but at every stage in your climbing development you’ll benefit from it. Your body learns a broadening repertoire of muscular adjustments, fingers strengthen, relevant muscle groups tone up, and the mind adjusts to noticing opportunities for movement and recovery - eventually subconsciously.



Jamie Allen at The Foundry, Sheffield. Bouldering is a great way to improve.

# THE GEAR:

## Taped Fingers

So you’ve seen pictures of people in the magazines wearing finger tape? Don’t copy them! The only sure way to prevent long term injuries is to build up finger strength over time. Using tape when you don’t need to will just cause problems.

## Chalkbag

To keep your fingers dry. Many walls will require you to use a chalkball to cut down on excessive dust in the atmosphere. Help reduce this further by closing your bag when not using it, and taking it off when bouldering.

## Rock Boots

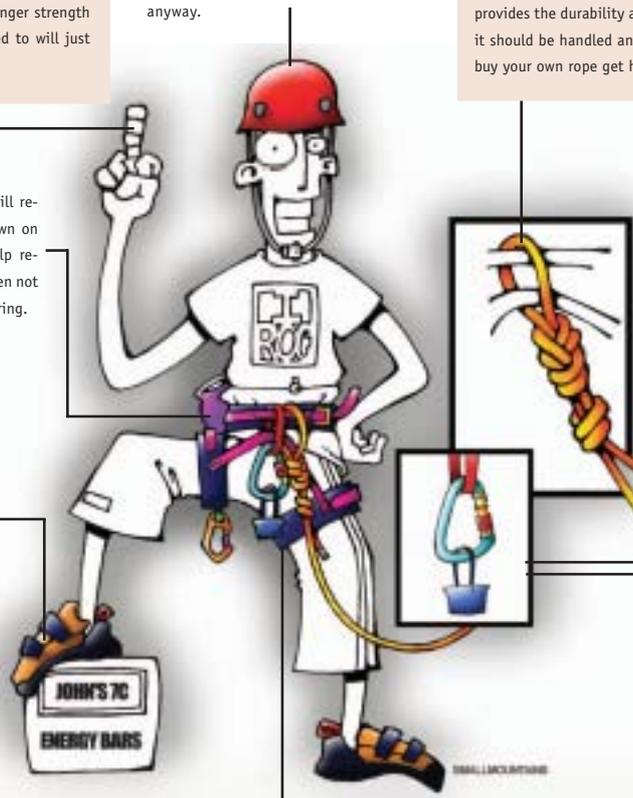
Precise footwork is fundamental to climbing, and poor shoes will hinder your development. The preconception that “feet slide off small holds” will take years to overcome if your early climbs are undertaken in sloppy shoes! Try out several different makes, they come in a bewildering variety of shapes and sizes. Choose a pair that feel comfortable but snug, with no spare space around the toes. Most climbers put shoes over bare feet to increase sensitivity, but there are no rules here, and socks give greater warmth and hygiene. The choice between rock boot, shoe and slipper is very personal. Slippers give little ankle or arch support and strain the legs when standing on tiny edges, but at the other end of the spectrum, rock boots give great support but limit flexibility without any benefit indoors. Don’t be lured into buying expensive asymmetrical shoes; at the highest level of performance these can make a difference, but for beginners they represent a painful waste of money.

## Helmet

A lot of people don’t wear helmets indoors, but remember that no type of climbing is risk free. If you think there is a chance of swinging and smacking your head, consider wearing a helmet. Some walls will insist you wear them for taster courses anyway.

## Rope

For your first climbs you’ll probably be using a rope supplied by the climbing wall and already fixed in place, or you will be accompanied by a more experienced climber. The rope is designed to be very strong but remain elastic enough to absorb some of the energy from a fall. For indoor walls a full strength (No.1) kernmantle rope provides the durability and strength required, and as your lifeline, it should be handled and stored with care. If you are planning to buy your own rope get hold of the BMC’s impartial Ropes booklet.



## Belay device & karabiner

A climbing pair will need at least one belay device with a screwgate karabiner to handle the rope. The choice is extensive, but can be broadly divided into ‘slick’ and ‘grabbing’ categories. Slick devices allow the rope to be paid out and taken in easily, but provide relatively little friction in the event of a fall. Examples of slick devices are the Air Traffic Controller (ATC) and The Bug. Grabbing devices help hold falls more easily, but require care when paying the rope out as they tend to be rather “all or nothing”. Examples of grabbing devices are the Gri-Gri and Single Rope Controller. These devices are good for top-roping but require considerable skill to use effectively for belaying a lead climber. Learning to belay with such a device could lead to problems down the line if you progress outside and want to use double ropes etc. Buy a karabiner with a screwgate that is designed to work with the belay device that you choose. Some devices will only work properly with wide-ended (or “HMS”) karabiners, so ask the advice of the shop when purchasing. A snap gate should never be used, since the belay device could be jolted out of the karabiner when shock loaded, with terminal consequences.

## Harness

A sit harness spreads the load between your waist and legs when hanging from a rope. Choose one with a central attachment point (belay loop) to belay from, and look for features such as foolproof buckles (to prevent threading error), and adjustable leg loops (useful if heading outside with extra layers on). The waist belt should fit snugly around the waist (not hips) when the leg loops are fastened snugly around the upper thigh. Some harnesses are designed for a longer pelvis with women in mind. Most also have thin gear loops for carrying equipment, remember that these are very low strength and NOT designed for belay attachment points. As with all technical equipment, using a second-hand harness is potentially dangerous unless you have a good knowledge of its previous use and an experienced climber has checked it over for signs of aging.



Penny Allchin leading at The Edge, Sheffield. Her belayer is paying close attention, but this is not always the case! Keep an eye on the job in hand, and try not to be distracted.

## RISK AND YOUR RESPONSIBILITY:

**Walls tend to be busy, sociable places. When you're surrounded by people having fun, it's easy to forget that all climbing involves an element of risk and to be lulled into careless mistakes by familiar settings.**

More accidents occur every year on artificial walls than on the obviously hazardous precipices outside, mainly due to a lack of awareness or simple lapses in concentration. The following safety points are relevant to any climbing wall.

**Climbing** always involves a possibility of falling from height.

**Holds** occasionally break or rotate, even when properly maintained. Check them before launching out above the void.

**Check** the landing area when bouldering. Is there matting throughout the possible landing zone? Is it fixed or might some-

body pull it away? Are there any gaps where mats join?

**Foam** matting absorbs the energy of a landing, but don't overestimate its ability.

**Double-check** the consequences of unfastening any anchor before you do it.

**When belaying** a partner, standing directly under the first anchor of the climb minimises the potential for being pulled off-balance.

**Don't be distracted**, concentrate on the job in hand!

**If** in doubt - ask.

**Indoor climbing** is an activity with a danger of personal injury or death. Participants should be aware of and accept these risks and be responsible for their own actions and involvement.

But before leaping on the wall, it's a very good idea to warm up first. Hauling your body weight by the fingertips puts intense strain on tendons and ligaments, and over the years this will lead to chronic finger and elbow injuries. A short jog, followed by some light movement and gentle stretching is all that's needed. Try to include finger stretches in any routine, holding the outstretched hand and gently pulling back.

Bouldering is safer and a lot more fun with an attentive and encouraging partner. Take turns to "spot" for each other - standing by, ready to slow or control a fall. Rather than trying to catch the climber, the spotter should field the shoulders to prevent a head-first landing. Work with your partner to develop problems by setting challenges such as eliminating holds or using only certain kinds of features. But remember that bouldering is an intensive activity, especially for newcomers, so don't be afraid to stop before you're worn out, most injuries occur when tired, having just one last go on that problem.

### Toproping

A top-rope is a pre-fixed rope threaded through a strong anchor point at the top of the climb, with both ends on the ground. The climber is attached to one end of the rope, while the other end is threaded through a belay device and continually adjusted in order to remain reasonably taut as the climber makes progress. Having reached the anchor point the climber is lowered back to the ground by the belayer.

The first stage is to fit the harness correctly around your legs and waist. Read the harness instructions and check each others' harnesses and knots as a matter of course. To attach a rope to the harness, I would recommend using a figure of eight knot threaded through both the waist and leg loops of the harness.

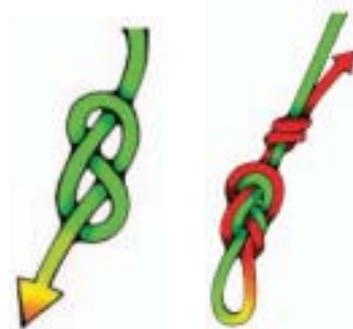
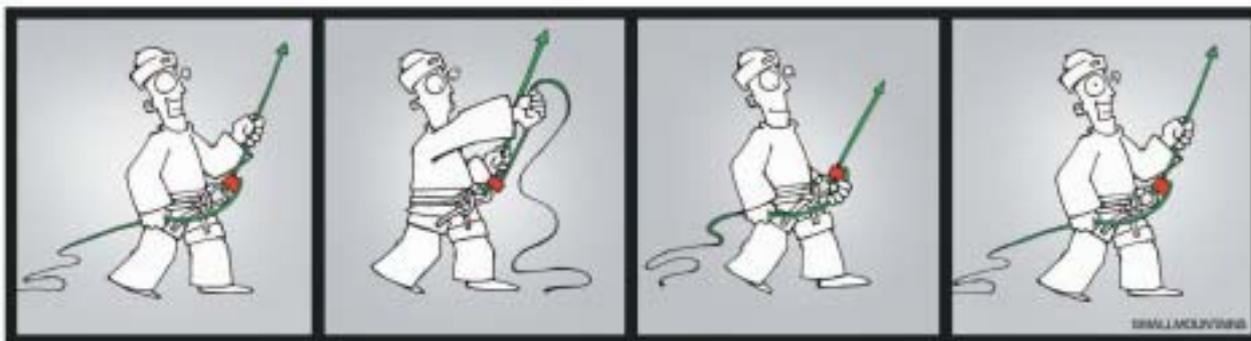


Figure of eight knot, with stopper.

The completed knot should be pulled tight and have a 'tail' end of at least 30 centimetres - not much longer or you will find yourself standing on it. Practise this knot. It's normal - but not essential - to tie an overhand knot around the main rope with the tail end, to act as a "stopper" (i.e. preventing it creeping undone). Another popular knot is the bowline, which is easier to undo after being loaded in a fall, but this is harder to tie and easier to get wrong.



**Belaying.** As with all climbing skills this is best learnt from an instructor or a more experienced climber. As illustrated here, the key point is to never take your hand off the live end of the rope.

### Belaying

Belaying allows you to hold your partner's weight or even arrest a fall. Using one of the many devices on the market, sufficient friction is applied to the loaded rope to allow you to stop a falling climber with your hands.

Belaying is a fundamental skill in climbing, but is often taught quite badly. Read the instructions for the device, and if you've been lent it by your partner, examine how it works. Most create friction by forcing the rope through some tight direction changes. Pulling the unloaded end increases this friction, usually in the opposite direction to the loaded rope. It is possible that you might be handed a more complex mechanical device to use, probably a Gri-Gri. This needs a little more training, particularly in how to pay rope out, otherwise it is easy to get it wrong and drop your partner when you attempt to lower them.

Thread the rope through the device as shown in its instructions and clip it onto your harness belay loop, taking care to lock the screwgat. The rope should be pulled back away from the direction taken by the live rope (i.e. the rope travelling towards the climber). This Z-bend is what provides the mechanism for holding a fall; otherwise the only friction is provided by the bend around the karabiner, forming a simple 1:1 ratio pulley. A belay device clipped to the belayer's harness should ideally be used with the belayer positioned sideways to the climb; this allows the belaying hand to be pulled backwards without being restricted by the belayer's hip. If in any doubt, do not hesitate to ask the advice of the climbing wall staff. Even experienced climbers find it hard adjusting to new devices, and it's far better to make mistakes on the ground.

### Taking in slack rope

Taking in the slack rope requires attention. As you move your belaying hand back toward the plate to take in again, hold the rope in the locked position with the other hand. If you get into the habit of doing this properly, the rhythm will become natural. While your partner climbs, you need to take the rope in at the same rate, so that it remains reasonably snug. That way, if the climber slips, the fall is simply a little stretch in the rope as it absorbs much of the energy. This is another vital skill, and needs practice to do well.

### Making progress

With an attentive belayer, the climber should be able to concentrate on movement. On steep climbs the rope may be threaded through intermediate anchors to prevent a huge swing outwards in the event of a fall. These need to be unclipped as the climber progresses beyond them; however, it is vital that the top anchor is left fastened. To minimise the risk of this anchor becoming unfastened the rope should be threaded through a locking karabiner or twin

karabiners. Carelessness over this point has led to several accidents in climbing walls, so both partners should be particularly vigilant as the climber approaches the top anchor. The climber should clip the rope back through one or more intermediate anchors (often referred to as "runners" "quickdraws" or simply "draws") while being lowered to the ground if the climb is overhanging.

**(BELOW)** Penny Allchin at The Foundry, having found another attentive belayer.



## SKILLS



### Leading

The lead climber trails the safety rope from the ground upwards, clipping it into quickdraws as progress is made. A fall can again be limited by the belayer, but as the leader moves beyond the runner, some distance must be travelled before that rope can tighten and field the fall. Lead climbing is thus both more exciting and inherently riskier than top roping or "seconding" a climb, and it should never be forgotten that an attentive and skilled belayer is essential. Communication is important, often distilled to curt unambiguous commands such as "slack!" when extra rope is required by the leader (probably in order to clip the rope through a quickdraw), or "take-in!" usually meaning that the leader is nervous or about to be airborne. However sociable the atmosphere, the belayer should never lose track of the lead climber's position. In climbing walls it is not uncommon for climbers to lead climbs after relatively little experience. The pre-requisites are confidence in rope-handling by both partners and sufficient practice at belaying not to get muddled at critical moments. However, a healthy respect for gravity should be maintained, and the potential distance and direction of a fall should be calculated be-

fore committing to a move. This is particularly important when pulling over an overhang or passing protruding holds.

### What next?

Some people spend their entire climbing career climbing indoors, but after a few sessions most will start contemplating transferring their newfound skills outside. And that can be a big step, so stay tuned for part 2; learning to climb single pitch routes in the great outdoors. II

**Steve Long** works for Plas y Brenin, the National Mountain Centre. PyB runs a full programme of courses to suit all levels of ability, from indoor climbers progressing to climbing outside right through to big wall climbing. All are delivered by experienced, enthusiastic and highly qualified instructors. Plas y Brenin is run by the Mountain Training Trust, a charity set up by the BMC, MLTB and UKMTB on behalf of the Sports Council. For more information on Plas y Brenin check out [www.pyb.co.uk](http://www.pyb.co.uk).

For more information on starting to climb indoors, check out the climbing skills section of the BMC shop on [www.thebmc.co.uk](http://www.thebmc.co.uk), or call the BMC office.

Hilary Bloor seconding at The Edge, Sheffield. If seconding think before you automatically unclip anything - people have unclipped the top anchors by accident!

A photograph of a woman with blonde hair, wearing a blue tank top and dark pants, climbing a blue wall with pink holds. She is looking towards the camera. The wall is part of a climbing facility.

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