



# SITE SPECIFIC TRAINING

BOULDERING

June 2019 Version

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## **PARTICIPATION STATEMENT**

The BMC Participation Statement says that: *The BMC recognises that climbing and mountaineering are activities with a danger of personal injury or death. Participants in these activities should be aware of and accept these risks and be responsible for their own actions.*

This document and the training which accompanies it do not provide for all aspects of climbing wall management or instruction thereof, the wall manager whom has contracted the training is entirely responsible for ensuring that all of the aspects concerning operating a climbing wall are complied with and kept to a standard acceptable to the relevant National Governing Bodies and any other applicable regulatory guidelines.

Upon successful completion of this training, and the following assessment, the participant will have been deemed competent with regard to the skills and techniques covered under this syllabus. This training and the respective trainer cannot ensure that safe practices are adhered to on a daily basis; this is the responsibility of the individual trainee and the Management of the respective climbing wall. Additionally, this training does not assess the individual with regard to their personal attributes or their suitability as an instructor other than that they have shown competence on the day of assessment. The climbing wall management is wholly responsible for insuring candidates are suitable for the position as an instructor.

Each candidate will be issued a copy of this syllabus to act as reference and a logbook for recording historical and continued experience. It is the duty of the individuals to keep this record current. It is the responsibility of the facility management to monitor that this is being completed. If supervisors are not actively using their skills, they may require refresher training, it is the duty of the supervisors and management to seek advice should there be any question about techniques or skills.

This training is valid only for supervision of non-rope climbing classified as Bouldering and Traversing, at the named facility.

This training is valid for one year from a successful assessment.

It is strongly recommended that a system for monitoring the safety and quality of sessions is developed and implemented by the facility management, if a supervisor is not actively using their skills they may need refresher training or at least to assist with sessions before working independently, this decision must be made by the individual supervisor and the facility management. If there are any questions regarding remit, validity or this training, please contact the training provider.

# Climbing Wall Services



## Supervisor Details:

Name:

Name and Address of Climbing Wall:

Initial Site-Specific Training Date:

Trainer:

Initial Assessment Date:

Assessor:

Pass

Deferred

Fail

Assessor Comments / Limitation:

Site Specific Recertification (Maximum 1 Year Validity)

Date	Outcome	Assessor	Comments



## **BOULDERING**

Bouldering is, in some ways, the purest form of rock climbing. It distils the sport to very simple terms: un-roped climbing focusing on pure movement and often at a high difficulty. Outdoor Bouldering at times can be extended to a greater height (Highball) to add severity into the equation but conversely the most difficult moves (crux) may be just getting off the floor.

Indoor Bouldering can be a sociable and enjoyable way to train for outdoors or be taken as a sport in its own right. Most indoor Bouldering is at a height between 3-4.5 metres and will have a considerable (normally 300-400mm deep, purpose built) safety surface below the climbing area. This surface does not eliminate the risks involved, although it does make the landings more comfortable.

Many of the accidents at a climbing wall happen while Bouldering and although usually not fatal, they can be serious. As the sport is intensive, extra care should be taken to avoid sporting type injuries and warm-ups and attention to tweaks and strains should be taken seriously, as an instructor (or coach) you are responsible for your students. A cold tendon or shoulder is ripe for damage and the last thing you should do is start your students anywhere near their limit.

### **A note on chalk:**

Different venues have different rules regarding chalk and it is important to adhere to the respective set procedures. Some walls have banned loose chalk and some have banned all chalk. There are arguments that chalk “balls” produce finer chalk and are worse for the air quality but they are less likely to spill and make a mess. Liquid chalk is another alternative, which produces no dust but is harsh on skin and expensive. Regardless, the reality is that for difficult bouldering, chalk is necessary and supplying a soft Bouldering “bucket” with chalk balls might be the best compromise for your group. Sometimes bouldering routes may be very rounded (slopey) and after repeated use the hold can become slick and caked with chalk. It is normal practice to brush the hold with a stiff plastic brush to clean it (not a wire brush), which increases the frictional properties. Encourage this but again be aware of the dust it creates.



## **Hazards and Group Management:**

During indoor Bouldering the most obvious hazard is that when a climber falls off, they hit the ground. Part of your responsibility as a supervisor is that you must make your climbers aware of the risks of the activity and manage them as necessary. Most importantly you must be diligent with your group control, it is critical for the safety of your group. Group management begins with your initial safety briefing, you are required to set the tone for the session and make your group aware of the risks associated with Bouldering; Awkward falls, spinning holds, other climbers and other wall specific hazards need to be taken in to account. The best way to brief your group is to develop a standard briefing which you use all the time (writing this down helps) obviously this will need to be adapted to suit different groups (kids parties vs. adult groups) but the process will have the same basic points:

- 1) Supervisor Checks
  - Check all paperwork has been completed
  - Check for medical conditions
  - Check that all clients are wearing appropriate clothing (no entrapment possibilities, correct footwear, no hazards)
  - Check that pockets are empty and rings/ jewellery are removed or made safe
- 2) Facility Brief
  - Toilets, fire exits, emergency procedures
  - Locker rooms, or storage for non-climbing kit
  - Keep the climbing area clear (bags, bottles, chalk...)
  - Other relevant information
- 3) Activity Safety Brief
  - Explain the seriousness of the activity, injuries can and do happen while Bouldering.
  - The matting under the wall does not make bouldering a “safe” activity injuries can and do happen
  - Be aware of other climbers, they can be above you
  - Do not climb under or over other climbers
  - Holds may spin, if they do report them to a staff member
  - Identify hazards of different areas (slabs, arches, blind spots) and how to best deal with them
  - Climb in control
  - A warning not to top-out (unless topping out is permitted)
  - Start easy and progressively try harder problems as you warm up
- 4) Behaviour Briefing (Group Dependent)
  - No horseplay, the area is NOT a play area
  - Only a set number of climbers on the wall at a time
  - Only allowed to climb in certain areas of wall
  - Only allowed to climb as high as set point

NOTE: Whilst supervising Bouldering you will need to be authoritative and if the behaviour of the group becomes a hazard it is your responsibility to stop the activity. If this is necessary than take your group out of the climbing area and discuss with them what you

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need them to do in order to continue. If they do not behave in accordance with your instructions and wall policy, it may be necessary to end the session. It is better to stop the activity than have to explain why someone got hurt.

As every climbing wall is different, these guidelines are not all-inclusive and may need to be changed to suit the facility, ask your trainer for clarification if needed.

## **Ratios:**

There will need to be a maximum number of people climbing at any one time, this will change depending on the facility and the group make-up. The supervisor will need to determine what is safe on a case by case evaluation; however, it is recommended that the overall maximum instructor to group ratio is 1:9. For effective supervision of novices, visual contact with group is necessary at all times. If there are other users in the area give them the right of way (within reason) and explain this to the members of your group.

## **Equipment:**

One of the advantages of bouldering is that there is limited need for equipment. Some chalk and a pair of climbing shoes are about all one needs to start, however without them it will be difficult to advance beyond very simple technique. Climbing shoes vary in quality and design, however they should be snug fitting (but not painful) and able to be used for heel and toe hooking. There should not be any loose material in the toe box and the heel should be secure. Velcro boots are quick to put on and take off, but lace ups offer a more adjustable fit. Some manufacturers are better than others with regard to the quality of the rubber on the sole but most of the main brands will be about equal. It is mainly down to how they fit your feet on which they should be purchased. The first time a climber wears a climbing shoe they may need clear fitting advice, and a

As an instructor you should be able to advise your students on what will work best for them but take care that they do not buy or use shoes which are too small as the possibility of lasting damage to their feet is real.

## **Spotting:**

In many centres the primary role of a spotter is to keep the landing area free from other people and possible hazards which might be under the climber, explain this to your group. Spotting can be a useful tool to help control the fall of a climber however, it is not intended to catch the falling climber, only to help them from landing awkwardly in an attempt to reduce the force of the fall and to guide them so they do not land in a way as likely to injure their head or spine (e.g. if their feet are above their head). Spotting requires complete concentration and quick reactions, otherwise it can be dangerous to both the climber and the spotter. Only experienced climbers should be allowed to spot each other and, in most cases, children spotting other children is not ideal, unless they are at an advanced level.

## **Peer Spotting:**

Peer spotting, at an advanced level, can be used to help teamwork and create a positive environment, but the spotters need to be briefed properly and, as the instructor, you need to be sure they are capable of doing it safely. As above their primary role in most cases is to keep the landing area clear. If you are in doubt **do not** use peer spotting and do it yourself.



If teaching spotting, some important steps to convey are:

- Always pay attention
- Do not position yourself directly in the fall area
- Try to help the falling climber land feet first (but don't push the climber towards the wall)
- Make sure both the climber and spotter have removed any objects which may be a hazard (hardware, rings, watches, helmets)
- Try to support the climber in an appropriate area e.g. the back or waist
- Be aware of the climber's head and elbows as they can injure the spotter

**Effective spotting height:** As an instructor it is better to spot those in need yourself, however the effectiveness of this is completely subjective, depending on you and your climber. Effective spotting height is the maximum height where a given spotter can safely spot a given climber, this height changes depending on weight, strength, height angle of wall and any number of variables. As a supervisor you need to keep those climbers who require spotting within your effective spotting height, if this requires you to make artificial height restrictions on your climber than do so.

### **Descent from the wall:**

Before letting anyone climb, they need to know how to descend. It is not reasonable to expect every climber to “down climb” every route, this is particularly true for beginning climbers where the easiest route in the wall might be their only way up. There is no way to eliminate the risk of injury while Bouldering, but as an instructor you have the responsibility to give them the best chance possible. There are 3 ways to descend from the wall:

1. Down Climb: ideally this will happen as often as possible as there is the least amount of risk – demonstrate this to your students looking at the holds as you go down and planning your descent before climbing
2. A Controlled Drop: If down climbing is not feasible or preferable, the climber may decide to conduct a controlled drop. Demonstrate this technique and the ideal falling / landing position, e.g. hang straight down with feet below hands, look for a clear landing area, land on feet (shoulder width) with knees bent and arms up, elbows bent and hands up to protect the face.
  - a. Do not put your arms behind you if you do fall backwards as it is more likely to injure wrists, elbows and shoulders
  - b. Do not rotate or keep your feet together
  - c. If you stumble forward use your hands to defend yourself
  - d. If you stumble backwards do not extend your arms behind, you as landing on an arm/wrist awkwardly can cause injuries – instead adapt the defensive position (as in an uncontrolled fall) and roll with it
3. Uncontrolled Fall: in an uncontrolled fall you could be in any position, if falling towards an object or hazard try to defend yourself and or push away from it (e.g. a slab). Ideally attempt to land as in a controlled drop is best but if this is not possible or you are rotating backwards, it is normally best to adopt a defensive position.
  - a. Tuck your chin to your chest (to try to avoid whiplash)
  - b. Pull in your limbs and cross your arms over your chest (to try to avoid dislocations and breaks)



- c. Close your mouth – (to try to avoid biting your tongue to chipping teeth)

These techniques will need to be demonstrated and practiced (practiced at ground/low level) being aware of space considerations and ensuring the group has no hazards behind or around them. It is sometime useful to drill these techniques at the beginning of each session so hopefully, if there is a fall the climber reacts automatically.

## **Etiquette:**

Bouldering is a very sociable sport and it encourages people to share information and help one another, however one of the attractions of the sport is the problem-solving nature it presents to achieve success. As an instructor don't always give the answers, ask them, give pointers, demonstrate, but help your students succeed. Try not to do it for them (unless they need it as a demonstration) your job is to give them the skills they need so that eventually they can work it out for themselves. This practice holds true even with normal users at the wall. Sometimes the most frustrating thing for a climber is when they have been working on a problem for ages and then someone comes up and starts giving un-requested advice (this is called "spraying"), always ask first!

Some basic bouldering etiquette is:

- Give the problem one go then step back and allow others a go, rotate around
- Ask before giving advice
- Don't stand/ sit / lie under climbers! Be aware!
- Do not leave water bottles or hazards in the landing zone!
- Brush the holds
- Don't do a problem if someone is working it out (if possible)
- Ask before spotting,
- When spotting, do not touch them unless they fall off (it ruins the clean ascent)
- If you find a loose hold tell the staff immediately

## **Rules of engagement**

When bouldering, different walls will have different rules. Check with the staff if you are unsure as the grades will reflect this. However most climbing walls follow the below:

- Seated starts if noted on grade list, or if generous holds are low (for the grade)
- Hands follow the same coloured holds (if the wall is featured then features and coloured holds are normally in for feet, but holds only for hands)
- Finish by matching the last hold or the top of the wall

Variations might include:

- Volumes and arêtes are in for hands and feet
- Crouching or standing starts
- Feet follow (or track) on the coloured holds only





## Grading

Most bouldering walls in the UK use either the Font (Fontainebleau) or the V Grade system. The Fontainebleau system originated in Fontainebleau Forest, France, which is one of the Meccas for international bouldering. The V grade was created by John “Vermin” Sherman in Hueco Tanks, Texas. Both systems are good but slightly different; the V grade system is broader and the Font grade system more specific (particularly in the lower grades). Some walls use a colour coded circuit type grouping, which although this works well in large centres, gives a very wide range of difficulty in each colour and can be difficult for an instructor to use with a group, although easier for the route-setter.

A bouldering grade chart can be found in the appendices.

## Bouldering Sessions

As with roped climbing sessions, bouldering sessions can have different goals depending on the needs of your students. The first step to any session is finding out what these goals are and then having a plan to achieve them. A children’s group or birthday party will obviously have a different structure than an advanced development course. But regardless, the session framework will normally have similar components. Below is an example of a generic session:

- **Introductions:** paperwork, safety briefing and centre overview
- **Learning outcomes:** These outcomes or goals for the session should be concise, clear and achievable.
- **Warm-up;** whole body/increased heart rate (such as jogging, games, exercise, whatever is appropriate) – major muscle groups – minor muscle groups
- **Activity:**
  - o Easier climbing or traversing with progressive increase of difficulty during the body of the session, technique development, physical training and mental training
- Sport Specific training (if appropriate)
- **Warm down:** This may be in the form of easy bouldering, stretches or games
- **Conclusion:** a chance to run through what’s been done, gauge the group’s understanding, encourage self-reflection, explain what will happen in following sessions and allow for questions.

Many games used for “fun” sessions can also be used for training, and with a little creativity they can be adapted to be an enjoyable way to help your students develop.

A list of games and activities are included in the appendices of this document.



## **Session Content Tips:**

### **Technique drills:**

Drills are really useful for ensuring that key techniques are practised a number of times, on both sides of the body and at different speeds (repeat slowly, repeat fast). Drills are a form of fixed practice and can be blocked (where the same skill is practised again and again) or random (where multiple skills are practised in a random order). Other forms of practice include variable practice (repeating a skill in a variety of situations) and distributed practice (where attempts at the skill are interspersed with breaks for rest and mental consideration). Drills and structured practice are covered in more detail on Mountain Training's Foundation/Development Coach training or Mountain Training Board Ireland's Level 1 Climbing Coach training.

- Example drills:
  - o Hover game
  - o Ninja Feet
  - o Twisting

**Self-directed bouldering time:** Once climbers have been introduced to the basics it is important to provide them with a feeling of autonomy, even whilst they're still under strict supervision. This can be as simple as letting them choose which climb to attempt or, depending on the group, allowing them to break off into smaller groups and climb around the centre. If this helps to meet the learning objectives it can be a very important part of the session.

## **Conclusion**

Indoor bouldering can be a great way to introduce and develop climbers. The lack of extensive equipment and significant height allows a wider spectrum of participants while the technical difficulty maintains interest. Running enjoyable and safe sessions can be easy but if in doubt contact a suitably qualified instructor (Mountaineering and Climbing Instructor or IFMGA Guide) for additional advice.



## APPENDICES:

Bouldering Grades		ROCKFAX .com
V Grade	Font Bouldering Grade	British Tech Grade
<b>VB</b>	3	4a
<b>V0-</b>	3+	4b
<b>V0</b>	4	4c
<b>V0+</b>	4+	5a
<b>V1</b>	5	5b
<b>V2</b>	5+	5c
<b>V3</b>	6A 6A+	6a
<b>V4</b>	6B 6B+	6b
<b>V5</b>	6C 6C+	
<b>V6</b>	7A	6c
<b>V7</b>	7A+	
<b>V8</b>	7B 7B+	
<b>V9</b>	7C	7a
<b>V10</b>	7C+	
<b>V11</b>	8A	
<b>V12</b>	8A+	
<b>V13</b>	8B	8C
<b>V14</b>	8B+	
<b>V15</b>	8C	

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## Climbing Games

**Add a Move:** Begin by starting the first sequence of moves. The first climber gets on the wall and climbs or traverses this sequence of moves. When the first climber finishes, he/she adds one more move. Each time a climber completes the sequence he/she adds on another move. You can play "hands only" where any foothold can be used, or specify both handholds and footholds.

**The stick game:** The person designated as the pointer will use a broom handle or any pole to point out the next hold. The climber begins climbing. The pointer taps the next hold. This should be times so the next hold is tapped just ahead of the person climbing. A good pointer makes it challenging but not beyond the climber's ability. The game ends when the climber falls. The climber and pointer then switch positions.

**Memory Game:** The first person points out a sequence of 4 to 10 moves. There are no markings placed on the wall. The second person has to climb the route remembering each hold. The value of this climbing game is it teaches you to remember the holds in the route, making it an easier transition from preview to climbing.

**Take Away:** Create a route of about 20 holds. Mark the holds with chalk marks. Each climber climbs the route. After each successful climb/traverse the finishing climber rubs out a chalk mark. If the next climber cannot climb/traverse it without falling the turn is passed to the next person. If no one can do it the original climber must prove it can be done. If he cannot do the move the mark is put back on.

**Twister:** Lay out a section of the wall just like a play field for the game "Twister". It has the same rules as normal twister.

**Dice Game:** Each climber rolls dice to see how many holds they can use to traverse the wall (you can make the end points shorter or longer) they each have three tries the winner has the most successes.

**Laps:** The first climber traverses across the wall back and forth using any holds (or harder using only one colour) for as long as possible without stepping off. Each subsequent climber tries to beat the score.

**Shark Attack:** This climbing game can be played with as many climbers as you can fit on the wall. It is very similar to musical chairs. The climbers start in a circle in the middle of the floor facing inwards - when you shout "Shark Attack!" they must get onto the wall as quickly as they can. The last person on the wall is out (either out of the game, or "loses" an arm or leg). You can add many variations to this game e.g. climbers may not use legs, etc.

**Time's Up:** For as many players as desired. Start with a five or ten second time limit. First player gets ready, and a timekeeper says when to go. The climber gets to as many holds as he/she can before the timekeeper yells, "Time". Second climber tries to beat that number. If the climber does, they win, and their time is the new goal. After everyone goes, end of round one, add time, start round two.

**Simon Says:** You can play this with a group of people. There is a leader (Simon, I suppose), this leader gives the group 15 seconds to get off the ground and stay there. After that time, the

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leader calls out various commands: "Simon says... move your left foot" for example and everyone must move the nominated limb to a new hold unless the command is not prefixed with "Simon says". Players are out if they fall off or do not obey the commands.

**I went to the wall and used...:** One person starts at one end of the bouldering wall. Their spotter calls out "I went to the wall and used a..." then they call out a move e.g. crimp, undercut smear etc. After the move has been completed the climber steps off and the partner repeats the move. The new spotter calls out the next move to be used. "I went to the wall and used a crimp and a smear." Repeat the moves for as long as you can manage it.

**Taps:** There will have to be a person on the floor to keep track of totals. This game was made up to assist the young climbers with concentration. What they have to do is climb like normal but every time they use any hand they have to first tap their head and then count out loud starting at one. The goal is to have the climber try to beat their personal best by trying to lessen the number of times they use their hands.

**Tap Its:** Working in pairs or more, one person chooses a hold for each hand and one foot. With the other foot they then see how many holds they can touch whilst their partner counts. They then swap places using the same holds, the person that touches the most wins. All about flexibility and realizing where and how far they can reach. They are not allowed to move the other foot or hands.

**Freeze:** All participants engage in traversing at the same time in the same direction at different locations on the route while one stays on the floor and randomly calls out "freeze." When that command is given the climbers must cease all movement, even if in the middle of moving from one hold to the next, for a pre-decided amount of time. Climbers may not move until given a "go" from the officiator timing the freeze. If a climber moves while in a "freeze" or falls off the wall he/she is out until next round. Last man standing (hanging) wins.

## **Written by:**

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F r o n t T w o F i n g e r s	J u g	O p e n C r i m p	C l o s e d ( F u l l ) C r i m p
			
S l o p e r	G u p p y	T w o F i n g e r S t a c k	G a s t o n
			
T w o F i n g e r P o c k e t	M o n o	P i n c h	D r a g ( O p e n H a n d )
			
H e e l H o o k	T o e H o o k	B i c y c l e	H e e l T o e

**More information on climbing games can be found at:**

[http://www.indoorclimbing.com/climbing\\_games.html](http://www.indoorclimbing.com/climbing_games.html)

Climbing Games By: Paul Smith (can be bought from Amazon)