

NICAS Level 3

'Demonstrate detailed knowledge of climbing equipment commonly used'.



Karabiners



SCREWGATE KARABINERS – a **screwgate** karabiner must be screwed up before use so that the bar cannot be undone.



SNAPGATE KARABINERS – as **snappgate** karabiner can be found on a quick draw, they are not screwed up however they have a spring in the bar to ensure that they *snap* back into place.

The karabiners used currently at Dynamic Rock with all bugs are called screwgate HMS karabiners, these are used as it makes belaying smoother as it has a large-round top bar.

The maximum that a karabiner can be loaded with can be identified by looking at the side of the karabiner (*see example below*). The figures seen below are the maximum load a karabiner can take when the karabiner is length ways, side ways and with the gate open.



KN – Kilo Newton

A Kilo Newton is equal to about 225 lbs, which is a force of gravity rating, this is equal to:

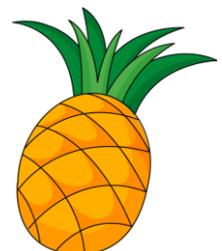
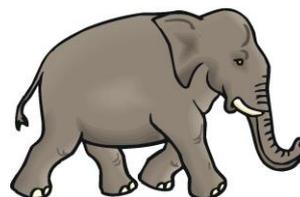
225 bags of sugar

112 and a half pineapples

25 KN is equal to 2.5 tonnes – this equal to:

An African Elephant

A White Rhinoceros



Belay Devices

A BUG – bugs are used from NICAS level 3 onwards, key things when using a bug is to ensure that the bug is loaded correctly, that the dead rope is coming out of the bottom of the device when loaded and that when belaying with a bug we *never* let go of the dead rope.

GRI GRI – all NICAS L3 candidates have used a gri gri as it is used during NICAS L1 & 2. The gri gri is an assisted braking device which enables teaching candidates to belay and lower climbers before progressing onto a bug.



Harness



To climb we need to wear a harness so that we can attach the rope to ourselves. During NICAS sessions we use a **DMM Alpine harness**. The harness can be easily adjusted and fit different sizes and body types.

The harness consists of a waist loop, two leg loops (**red for right**), one gear loop, elastic leg retainers and a yellow coloured tie-in and belay loop.

Another harness used during instructed sessions is the **DMM Brenin Harness**. This harness does have some similar features to the Alpine Harness however it is much more similar to a traditional harness with a vertical tie-in and belay loop and an Auto Buckle System (ABS) – *removes the hassle of having to double back*.



Shoes

Climbing shoes are key when climbing as you require flexibility to allow movement, powerful grip to ensure traction and close-fitting shape for the best control possible. Climbing shoes come in all shapes and sizes for different forms of climbing and different levels of ability – e.g. the more serious climber will favour a more aggressive shoe.



However our hire shoes here at Dynamic Rock often end up with holes in the toes – any idea why?

Helmets

When candidates get to NICAS L3 we take away helmets, why do you think this is and what are the main purposes of helmets?



Rope

The ropes already in place at the centre are called *dynamic ropes*. A dynamic rope means that it has some *stretch* in it, the stretch allows a dynamic rope to absorb the energy of a sudden load such as a fall. The inside of a climbing rope is called the *core* and the outside is called the *sheath*.

Kit care

All the kit in Dynamic Rock is checked on a weekly basis, what sort of things do you think kit such as a rope, a karabiner and a harness are checked for?