Learn all the parts of an ice axe before you buy so you can choose wisely.

Before you buy and use an [ice axe](http://climbing.about.com/od/climbingequipmentwords/a/IceAxeDef.htm), you need to have a working knowledge of the different parts of an ice axe. [Mountaineers](http://climbing.about.com/od/mountainclimbing/a/MountainClimb1.htm) and ice climbers use various kinds of ice axes whenever they climb snow and ice. Most mountaineers and mixed climbers use a basic ice axe in the mountains, whereas ice climbers, unless they’re climbing low-angle ice, use specialized ice climbing tools that are modifications of the traditional ice axe.

**3 Main Components**

An [ice axe](http://climbing.about.com/od/climbingequipmentwords/a/IceAxeDef.htm) is composed of three main components: head, shaft, and spike.

**The Ice Axe Head**

The head of an [ice axe](http://climbing.about.com/od/climbingequipmentwords/a/IceAxeDef.htm) is its single most important component and the one that has the most variation between different axes. The head, usually made of steel, is composed of three parts: pick, adze, and carabiner hole.

**The Pick**

The pick is the long sharp end of the ice axe’s head. The pick is used for swinging into hard snow or ice. The pick is curved, usually with a 65 to 70 degree angle on a mountain ice axe. Technical ice climbing axes and ice tools have a sharper curve, usually 55 to 60 degrees. The clearance or the angle of the pick’s tip to the shaft can be either positive or negative, although most axes have a positive clearance since they are more useful for hooking into ice. The end of the pick has serrated teeth for grabbing and holding in snow and ice. The pick is the part of the ice axe used for self-arresting or stopping a fall on steep snow. When climbing snow or ice on mountains, the pick is carried facing forward in preparation for a self-arrest.

**The Adze**

The adze is the broad end of the head that is shaped like a small shovel. It has an outer blade that is used for chopping steps in hard snow or ice and clearing platforms for belaying or bivouacking. The adze also is grasped by the hand in a self-belay mode in preparation for a self-arrest. When walking with an ice axe, the adze usually faces forward.

**The Carabiner Hole**

The carabiner hole in the head at the top of the shaft is used for clipping a [carabiner](http://climbing.about.com/od/climbingequipmentwords/a/CarabinerDef.htm) to the [ice axe](http://climbing.about.com/od/climbinggear/a/Which-Ice-Axe-Do-You-Need.htm) or more often to attach part of the hand leash to the axe.

**Ice Axe Shafts**

Ice axe shafts are made of aluminum, steel, carbon fiber, or wood. Aluminum shafts are usually best since they’re light but strong. Steel shafts are strong but heavy. Carbon Fiber shafts are very strong, lightweight, but also expensive. Wood shafts are rarely used now but are strong and relatively light. A straight ice axe shaft is best for general[mountaineering](http://climbing.about.com/od/mountainclimbing/a/MountainClimb1.htm), since they can easily plunge into snow and can be used for self-arresting and as an ice axe anchor. Curved shafts are designed to increase the power of swinging the tool into ice and are used for technical mountaineering, mixed climbing, and ice climbing. Some shafts have a rubber coating to increase hand friction and grip on the shaft. Athletic tape can also be added to the shaft or you can wear gloves with rubber palms to increase hand friction on the shaft.

**The Spike**

The spike is the tip of the ice axe, usually made of steel, which can poke and plunge into snow and ice. The spike is used mostly to provide balance when walking across snow. Some ice climbing tools don’t have spikes to save weight. Other ice tools have a ferrule or an additional angled spike which can be used to provide stability when the pick is hooked into ice.

**The Leash**

The leash is a webbing strap that attaches the ice axe to your wrist so that you won't lose the axe if you let go of it, drop it, or lose it in a fall. A leash is considered mandatory in most mandatory in most mountaineering situations since if you lose your axe, you could lose your life.