

Multipitch Climbs, Anchors, & Cleaning

- Introduction
 - Multi-Pitch vs Single Pitch
 - Personal Tether - sling, PAS, daisy, tied, Purcell Prusik, rope chunk....
 - Nylon vs UHMW PE
 - **Clip in twice**, and why - redundant attachment ⇒ no accidents
 - Knots for (intermediate) climbers
 - Clove & Munter hitches
 - Prusik, Autoblock, Klemheist, & Bachmann
 - Valdotaire Tresse (for line) & Machard tresse (for loop)
 - Use the **rope as primary attachment** to anchor w/ clove
 - Rope packing & stacking techniques
 - Rope bag - tie one end, puddle, tie other end; taco-burrito-stuff-cinch
 - Stacking on a ledge - puddles, not coils!
 - Butterfly coil
 - Stacking on your tether - butterfly rules!
- Pitch transitions - efficiency counts; a pitch transition needs 3 things to happen
 - Transfer all gear to the next leader
 - Restack rope(s) if needed (generally not swapping leads)
 - Setup belay for leader (swap anchor top belay to harness belay)
- Rappel - belaying yourself on 1 or 2 ropes; 3rd hand or fireman belay as backup
 - Autoblock below rappel device
 - VT or MT above rappel device
 - Slings out the rappel
- Loss of communication protocol - How to keep everyone protected always
 - Leader-
 - At the end of the pitch, build an anchor, clip in, and send “off belay”.
 - If no response, immediately assemble a belay; send “belay on”.
 - Belay the rope until the follower reaches the anchor.
 - Belayer-
 - Belay the leader until “off belay” or all the rope is fed out.
 - When the rope is fed out, prepare to climb.
 - Disassemble the anchor.
 - Start climbing, send “climbing”. Climb to the leader, slowing down when necessary to keep rope slack minimized.

NOTES:

- Climbing Anchors, including top-rope anchors
 - From planet to Power Point, an anchor must meet **STEAMERS**
 - **Strong** - each piece needs to be individually strong as possible
 - **Timely** - faster is better, all other things equal
 - **Equalized** - all pieces share equal load, AT ALL TIMES
 - **Angle** - keep the angle between legs less than 90°
 - **Minimal Extension** - Minimize shock loads when piece fails
 - **Redundant** - No single point of failure from planet to power point
 - **Simple** - Simpler is easier to inspect, faster to build, uses less gear
- 2-Bolt Climbing Anchor Setup
 - Check bolts & attach slings; tinker to get rope in free space
 - Clip rope, set carabiner directions
 - Check setup & verify redundancy
 - Alternative anchor setups
 - Quickdraws - opposite opposed at the rope
 - Quad - pre-rigged vs tied in place; clip any 2
 - Single sling - limiter knots, sliding X
 - Cordelettes - BFK vs equalette
 - Others - Girth-hitch MP (DO NOT USE!)
- Clean an anchor, with rappel or lower - no longer going up
 - Clip in, get off belay (for rappel)
 - Pull up ~20' rope and secure to anchor or harness
 - Untie your 8, thread through chains, tie a stopper knot; or push a bight through
 - Pull rope through, starting with the 20', to the ½-way mark or until down
 - Rig your rappel (lower); biner block if Grigri
 - **TEST YOUR RETREAT SYSTEM**
 - Unclip personal anchor(s) & rappel (lower) to the ground
- Clean an anchor on a multipitch - still going up
 - Wait for top belay
 - Remove all anchor gear, rack on your harness
 - Send "climbing", wait for "climb on"
 - Climb!

NOTES: