

Graduation Weekend – Instructor Handout

Knots:

- Students must tie all the knots (listed below) and explain what each is used for.
- Students must be able to tie it properly the first time.
- Are you confident that the student can tie the proper knot on their own when they need it?
- If a student is not confident in their knot tying, send them away to practice and tell them to come back and demonstrate at crew hill.
- Critical knots to tie and explain - students need to be absolutely confident with these:
 - Rewoven Figure 8
 - Flat Overhand Bend (EDK)
 - Clove Hitch
 - Autoblock
 - A knot suitable for the ends of a rappel rope
 - Fisherman's Backup
- Other Knots students must be able to confidently tie and explain
 - Bowline
 - Girth Hitch
 - Figure 8 on a Bight
 - Double Fisherman
 - Münter Hitch
 - Water Knot
 - Klemheist
 - Bachmann
 - Prusik

Top Rope Anchor:

- Each student must build a top-rope anchor completely independently.
- Students must be able to explain what SRENE stands for.
- Students must then explain what each part of SRENE means and how their anchor satisfies the SRENE requirement.
- If a student is unable to properly setup a safe top-rope anchor without assistance ask them to set up another. (Or send the student off to work with an instructor/assistant.)
- Are you confident that the student can set up a safe top-rope anchor on their own?

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Fixed Anchor cleaning:

Setup:

1. Install two pairs of chains/rings using quick links on the bolts in N Wall, close to the highest point of the meadow. Set up a top rope using draws on each pair of bolts.

Process:

2. Explain what cleaning a fixed anchor means and when to do it:
 - a. when seconding a single pitch trad climb or the last person to top rope a sport climb
 - b. the leader's gear must be removed
 - c. set yourself up for lowering or for rappel
3. Lowering versus rappelling:
 - d. rappelling is less wear on the fixed hardware, but is more error-prone and takes more time to set up
 - e. lowering can (usually) be done without ever being off belay
 - f. depends on the norms/ethics of the climbing area
4. Instructor demonstrates methods for cleaning a fixed anchor.
 - g. have a student be your belayer
 - h. explain how not to lower a leader off the end of a rope
5. Explain lowering on quicklinks.
6. Demonstrate/explain lowering through rap rings
 - i. time permitting, show both the “push a bight through the rap rings” method as well as threading the end through and tying into the rope again
7. Demonstrate/explain rappelling from rap rings
 - j. use stopper knots to avoid rappelling off the end of the rope
8. Points to emphasize:
 - k. make sure you don't drop the rope
 - l. make sure you have good communication with your belayer (especially for lowering; make sure the belayer knows before you climb)
 - m. difficulty when you are hanging on the anchor

Have each student clean a fixed anchor with one of the above approaches. Student should be weighting the anchor by leaning back but not hanging from it.

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Multi-Pitch Rappelling:

Note:

1. Make students do a “real” multipitch rappel – even though at Quincy Quarries they can see when the rope has reached the next anchor or the ground, make them tie stopper knots (the recommended default practice) and find the middle of the rope

Preparation

1. Find a good spot with a good stance for the intermediate anchor—an instructor will be standing or hanging at it for much of the day! J wall has worked well for this, and you can get two rappel lines operating.
2. Build the top anchor as well as a top-rope anchor for the student.
3. Build the intermediate anchor. Remember that an instructor will be here much of the day!

Process

1. Students start at the top of the cliff. Suggested rotation: backup top rope belayer becomes the next student to rappel.
2. Give the student an overview of what happens in a multi-pitch rappel. Explain that intermediate anchors at less-than-ideal stances are often part of the climbing experience.
3. Give the student a rope and have him/her set up the rappel. Ensure that students:
 - a. Anchor in at the top
 - b. Properly find the middle of the rope
 - c. Tie end knots
 - d. Yell “ROPE!” (twice, with a pause in between) before tossing the rope
4. Student ties into to backup top rope belay and goes on belay.
5. Student does the first rappel:
 - a. sets up a tether or cow’s tail to anchor at the intermediate station
 - b. sets up their rappel device
 - c. gets into position
 - d. takes themselves off the anchor (student is still on backup TR belay)
6. At the intermediate anchor, the student (with instruction as necessary):
 - a. Anchors in
 - b. Unties stopper knots and pulls rope (emphasize not dropping the rope!)
 - c. Sets up next rappel as above
7. Once on the ground, the student pulls the rope and coils it.
8. The student returns to the top for feedback, to return the rope (and any club gear), and gets their green book signed.

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Double Rope Belaying:

1. Explain the merits of double ropes (added safety due to extra redundancy, reduced fall distance at a clip, double rope rappelling, potentially lower drag, etc) as well as the downsides (heavier, potentially higher drag, more wear/shorter system lifespan, etc).
2. Describe the general process of belaying with double ropes. Ensure the student understands that one rope may tighten while the other goes slack. Stress the importance of keeping control of the belay even when drawing slack on only one rope.
3. Reinforce the idea of the “smile” in the belay rope, and that now the smile must be maintained in both ropes. This can mean taking in or letting out rope on only one rope.
4. Have each student belay a simulated leader (possibly another student) on double ropes. (This can be done on 3rd class terrain, such as the scramble to the top of Knight’s wall so that no backup top rope belay is necessary.)
 - a. The belayer should give out slack on ropes appropriately as the leader climbs.
 - b. When the leader clips a piece, the belayer should give out slack on one rope and take in any extra slack after the piece is clipped.
 - c. Watch to ensure that the belayer is maintaining control of the belay as they let out or take in slack on one rope.