

**Student Skills Day:
DEN ASC Student Skills Day: Maxwell Falls**

Objectives: teach/review/demo scrambling skills in the field with students (preparation/screen for Scramble Field Days)

Overview: Navigation, Protection/Gear, Bouldering, Talus Travel, Emergency Shelter and BIVVY

- Meet Up: 6am Twin Forks ParknRide
- Carpool to TH, hike as a group to Training Spot
- [MAP](#)
- [Weather](#)
- Training:
 - **As ONE Group:** Introductions/Objectives/Chest Harness
 - Divide into **THREE Student Groups** and rotate through each section:
 1. **Navigation/Hand Line**
 2. **Scrambling and Climbing Techniques/Spotting**
 3. **Gear: Scrambling Gear/BIVVY/Spend the Night**

Introductions/Objectives/Chest Harness (30 min)

□ *Delivery:*
Video: [Chest Harness with Webbing Loops](#)

□ *Delivery:*
Once we arrive at the designated Training Site at Maxwell Falls:
-Gather Students and do brief introductions.
-**Mike:** Will Address Group review schedule of the day; divide students up into three groups and then DEMO/explain purpose of Chest Harness.
-**Sarah:** Help Students make their chest harnesses
-**Cyndi:** Will not be with the group/setting up Hand Line

Navigation and Hand Line (1 hour)

□ *References:*
FoTH p. 90-107
FoTH: p. 398 (Chest Harness/Prusik Slings)
[How to Read Topographical Maps](#)
Video: [Rope with a Prusik Hitch](#)
Video: [Prussic Hitch](#)

□ *Delivery: 30 min Map/30 min Hand Line*
This teaching objective will emphasize identifying topographical features/identifying your location on the map.

1. Orientation to Map (GPS/Large Map)
2. Route: Trail Junctions, Stream Crossings
3. Colors/Distances/Elevation Gains: Route Scale for Distances/Tree versus Non Vegistion Areas, Slope Colored Shading (note: 40 meter contour lines)
4. Topographical Features, Contour Lines, Slope Angles (stressing mental picture from map topo features)
5. Hand Line: Explain usage, Prusik Hitch, have each student use the Hand Line

□ *References:*
FoTH: p. 398 (Chest Harness/Prusik Slings)

□ *Delivery:*

At this point the group has descended from the higher points of Western Snow Slopes back to rocky area at base Emerald Lake (to Belay/Lower Student rigging set up area.) Before group starts removing wet gear, do brief DEMO on Chest Harness (Note: Instructor DEMO only as students will practice in individual group.) Then give students time to remove wet clothing, settle in with lunches as the next two sections are lecture only.

1. Chest Harness:

Teach: How to Don a chest harness

Note: students can now remove wet clothing/ settle in, eat lunch as next sections are DEMO/Lecture

2. DEMO: Belay/lower student:

- discuss reason/need for use
- instructors responsible for rigging protection

3. DEMO: Prusik Hitch on a line

- discuss reasons to utilize
- instructors assist with set up

Scrambling Techniques (1 Hour)

□ *References:*

Self-Guided PowerPoint: [Scrambling and Climbing Techniques](#)

➤ *Delivery:* Short lecture presentation, the DEMO all the concepts below. Have students seek out/find areas to DEMO all these concepts ...

1. **Presentation:** Overview: Less than 10 min Lecture to the small group: Hand/Footwork, Basic Moves, Down Climb, Talus Travel ...

2. **Hand/Footwork**

- Use of legs greater than arms
- Arms: not pulling/guiding
- Legs: **shifting weight**
- 3 Points of Contact
- Footwork: Edging turning foot to increase surface area, Smearing: no foothold/use shoes rubber friction
- Handgrips: major take away: we can't always get our whole hand on the rock to hold, use partial grips with fingertips/palms or undercling

3. **Three Basic Moves:** Mantle, Layback, Stemming

- Note: Have students find rock areas to DEMO/Practice these three moves
- More difficult descents; Face in or out?

4. **Rock Travel:** Over Talus:

- Point out talus area for small group practice
- Relate wide stance and may or may not use one pole while descending

5. **"Spotting":** Instruct has simple personal anchor and explains how we may "spot" students at times as able; re-iterate inherent risks of exposure/scrambling

Gear: Scrambling Gear/BIVVY/Spend the Night (1 Hour)

□ *Reference:*

Video: [Spend the Night/BIVVY](#)

□ *Delivery:*

1. Discuss gear requirements for emergency spending the night: 10 Essentials: BIVVY, Emergency Shelter, Food/Clothing/Fire/Water Purification and CHECK EVERY STUDENTS PACK for scrambling gear to include a BIVVY and Shelter to Spend the Night.
2. Group Activity: Put up SOL Tube Tent (and put it away for the next group)
3. *Expect questions about:*
 - Why do we need to carry all this, specifically a BIVVY and Shelter (**Talking Points:** Scrambling is a high risk activity/off trail in remote locations where waiting for help can encounter cold/hot/wind and an injured party has high risk of shock which can lead to death.)
 - Why do we need to wear lugged soled boots? (**Talking Points:** Boots needed for snow travel, wet travel, scree, balance over talus and approach shoes are not acceptable for our scrambles.)
 - Stress: We teach our students the safest techniques and require this specific gear on all scrambles. We do a gear check at carpool meet ups and students not having all the gear will be turned away.

