

2013 Northwest Children's Conference

Rock Climbing

Rock climbing is a great activity, lots of fun and a wonderful way to interact with students in the outdoor recreational setting. It is a safe activity provided you have quality and safe gear and a basic understanding of Rock Climbing. Understanding how to check the gear for safety and redundancy is essential, so taking the time to learn more about the sport pays off.

What to know before you go (or bring)!

- Permission Slips! We send home a letter detailing what we will be doing for the day to give the parents a heads up. We take the permission slips with us.
- Safety Plan- Includes nearest emergency response, emergency numbers and incident report forms. We go to Smith Rock, so we also include the park numbers and the nearest litter.
- Your own bag-Includes extra water (someone will forget), extra food (someone will forget), extra clothes, sunscreen (someone will forget that too) and a small first aid kit for scrapes, dings or bumps. I have my own climbing gear so I bring that too. It helps and can create some extra routes for the kids. Parking usually has a fee, so bring along a couple of bucks just in case.
- Going with a guide service? Meet the leaders before the trip and work out a plan. Give them a clear time table for when you arrive, how much time you have to climb, etc.
- Guide Book! Most major climbing areas have guide books that describe the history, the geology, ecology, rules and etiquette, routes, the gear you'll need, etc. In truth, a lot of climbers are real rock and plant nuts, so they know a lot about the area they climb, and include that info in the books. These books are absolutely invaluable tools and can help you share a lot about the area with the students! They can be found at the parks websites, amazon.com, or climbing shops. They are updated from time to time so try to find a newer copy.
- Compasses, extra rope, etc. Sometimes we set up extra stations for the kids to explore knots, compasses, etc. Climbing is a one kid at a time per rope activity. Most kids enjoy relaxing in the outdoors and watching, but sometimes they need something to do while waiting for their turn. Occasionally a kid will want to climb but may take until the end of the day to go up (or not at all), and other activities help.
- Enough staff. Belaying should and does take all your attention. There should be a couple of staff to keep an eye on kids that are not climbing besides the belayers.
- Low impact or no Trace. Know it and go over it with the kids. We talk about erosion and staying on the trails and not destroying the area around us. We have the kids police the area before we leave. Our rule is that we have to leave the area better than we found it.
- If you don't personally know how to "clean" a route (aka remove the gear) and aren't going with a guide service, bring someone who does. Otherwise, the gear stays where it is.

Types of Climbing

Rock Climbing- Individual or teams use routes to ascend various rock structures.

- **Traditional or "Trad" climbing-** Rock climbing that requires the climber and a partner to ascend the rock by placing various types of gear (A trad rack; nuts, bolts, pitons, cams, etc) in cracks or features

in the rock that allow for the gear to hold tightly so that a climber is protected if they fall. Climbers use dynamic ropes during this type of ascent. Routes can include multiple pitches, which are several routes linked together vertically, typically the length of 30-35 meters.

- **Sport climbing**- Rock climbing that requires a climber and a partner to place quickdraws (draws) in a permanently placed bolt on a specific route. Typically the routes are one or two pitches.
- **Ice climbing**- Similar to sport climbing except that the routes are climbed on solid structures of ice. Climbers also use ice axes and crampons to stick to the ice.
- **Indoor Climbing**-Climbers use man-made structures called holds attached to manmade terrain to climb specific designated routes. Many climbers use this as a practice field for outdoor climbing but it has rapidly become a type of climbing on its own and has spawned competition in the X games and other widely publicized events.
- **Free climbing**- A climber vertically ascends a route without any safety gear at all.
- **Bouldering**- Climber ascends shorter routes that move both vertically and horizontally without safety gear but places a mat (crash pad) beneath to land on for falls. Often includes a partner for spotting, but is not absolutely necessary.

Mountain Climbing/Mountaineering

- Climbers ascend specific routes on Mountains in order to ascend to the peak of the Mountain. Requires similar gear to traditional climbing, knowledge of weather and terrain, additional safety protocol and climbing technique, and generally an experienced leader to lead the route to the top.

Ways to get to the top

- **Lead Climbing**-One climber (usually most experienced or comfortable) places gear as the team ascends the route. The climber clips the rope into the gear and at the end of the pitch sets the anchor to bring the other climber up for the next pitch or is lowered down to create a top rope. This is good for a demonstration, but we never let the kids do this.
- **Top Roping**- Someone leads the route and then lowers down and unties. The rope goes from the new climber, through the anchor to the belayer. Extremely safe way to climb and good way to learn. A good belayer can keep a climber tight with little slack and make them much more comfortable. There is no risk of falling from a piece of gear down. They can also talk a climber through the lowering process. This is the only way we let kids climb.

Equipment & Gear- Check out rei.com/learn or go to the main site and choose the learn tab for more info.

- **Harness**- A harness can vary based on type of climbing. Piece of equipment comprised of webbing and padding designed to go around the waist and legs. Waist belt (swami belt) should be comfortable and have gear loops. Should have two loops for tying in (one at waist and one between legs) and a belay loop. Should be well made, good solid stitching, solid thick metal buckles for tightening, no frays. Best if buckles already have a double back system. If not, know how to double back a harness. Good harnesses; Petzel, Black Diamond, Mammut
- **Helmet**-Get one or have one provided. Rocks break, people slip, hands get tired and cold. Hitting your head on rock hurts.

- **Ropes-** Climbing ropes are dynamic ropes (Kernmantle), they stretch to absorb load and reduce impact on the body when a climber falls. They have a core designed to stretch, and a woven sheath to reduce abrasion and can also affect handling of the rope (important if you are an expert and picky). Ropes come in different sizes and lengths, most common-9.8 60 meter dry rope. Translated: slightly thick 60 meter long rope that can get wet and not freeze solid. Going with a guide service- make sure the rope is not overly frayed, or squishy in spots (core shot) Should feel universally solid throughout.
- **Quickdraws/Anchors/Belay devices-** Loops and webbing should be solid, well stitched with few frays. Metal should be solid with no cracks or damaged gates and not too many burrs, particularly for belay devices, which should also have a loop to attach it to the harness. Carabiners and quickdraws should have good workable gates. Belay carabiners should lock either automatically or by twisting it. The lock should work and work well.
- **Shoes-** Shoes are relative to the type of climbing being done, and are optional, kids can climb without them, though they are great to have. Indoor soccer shoes work well or any other low profile shoe. Boots are horrible, they have no flex and no feel, and the soles are typically way too thick, discourage these shoes. Note: CLIMBING SHOES DO NOT HAVE TO BE INSANELY TIGHT AND PAINFUL! This is a climbing urban legend. Climbing shoes should be snug, but comfortable and the thought of ripping the shoes off as while you are being lowered down because you want to cry is not necessary.
- **Chalk bag-** Also optional, but kids are intrigued by the chalk. It is meant to help sweaty hands, and some places have rules about chalk so check ahead of time.

Technique

- **Long arms-** Put the weight on the bones not the muscles, by lengthening the frame and extending the joints. Muscles fatigue.
- **Use your Feet & Legs!** Climbing is really done with the legs, foot placement and the core. The arms work hard too, but leg muscles are bigger and last longer.
 1. **Toe In-**Toe faces rock
 2. **Edging-**The inside/outside of the foot near the ball of the foot is in contact with the rock
 3. **Smearing-**Ball of foot slides down surface and “sticks” to surface.
 4. **Heel Hook-**Back of heel hooks on feature and the leg pulls to the body.
- **Look where you want to go-** Slow down, scan and spot where you want to put a hand or a foot. Don't scrape around looking for it, see it and think about it.
- **Koala Bears belong in trees not on rocks.** If you look like a scared Koala Bear with your legs and arms drawn in directly facing the rock, this won't work. Spread the limbs out, keep your hips close to the rock and think about a snake slithering up the rock. Move, turn and twist, explore the rock and learn your body; make it work for you and be creative.
- **Relax the hands-**Beginners tend to over grip and hands wear out quickly, hands need to relax and hang on the bones.

1. **Jug**-large hold with large pocket, easy to grasp
 2. **Crimper**-Small (or tiny or miniscule) hold with ridge for 1 or more fingers.
 3. **Sloper**- smooth, angled hold that palm has to use friction to hold on to.
 4. **Pocket**- Hole in the rock, fits one or more fingers.
 5. **NEVER EVER USE METAL FOR A HOLD**-I always tell the kids if they like their fingers where they are, they can't grab metal. Plus its cheating.
- **BREATHE!** First time and new climbers hold their breath or breathe really fast. Slow down, take a few breaths, look around and enjoy the view. Loosen up your grip, learn to trust your feet, hands and self. It is ok to hang out.

Belaying

- Belaying is the process of drawing up the slack in the rope that passes through the anchor (or quickdraw if lead climbing) to the climber to create a safe line to fall on.
- **Adult or Experienced**-We don't let the kids belay. We teach them how to, but it often takes time to learn and should be done by an attentive and experienced person.
- **Belaying Requires attention and communication.**
- **BUS**- We use the BUS method (Below, Under, Slide) Hands are below the belay device, the reach is under the other hand, and the hand slides up the rope to draw the slack, never coming off. The safest method, the hands are always on the rope, and the rope is in the lock off position, making reaction time quicker.
- **REDUNDANCY**-Before climbing, the belayer should ALWAYS check the figure 8 tie in and the climber should ALWAYS check the belayer's device and make sure the carabiner is locked.
- **Lowering**- Coming down is ALWAYS the hardest part for kids. It takes trust. Climber should sit in the harness, feet in front, legs at 90 degree angle at the hip, hands off the rope or in front of body. Belayer will slowly lower and climber "walks" feet down wall.

Climbing Language Protocol

- **Climber**- "**On Belay?**" (Are you ready to belay me?)
- **Belayer**- "**Belay On.** (I'm paying attention and I'm ready to belay you.)
- **Climber**- "**Climbing.**" (I'm climbing now)
- **Belayer**- "**Climb on**" (Go ahead and climb)

When reaching the top or taking a break.

- **Climber** "**Take!**"- (Take up the rest of the slack, I'm at the top or need a break.)
- **Climber** "**Lower**" (I'm done. I want to come down now.)

Seems like a lot, but once you get the hang of it, climbing can be a blast. There are so many things to build on, incorporate into the lesson, and have a great opportunity to connect with the kids. Have fun!

Resources

Rock Climbing Smith Rock State Park- A Falcon Guide By Alan Watts
 Knots for Climbers 2nd Edition- Craig Luebben

Rock Climbing: Mastering Basic Skills- Craig Luebben
How to Rock Climb! 5th Edition- John Long