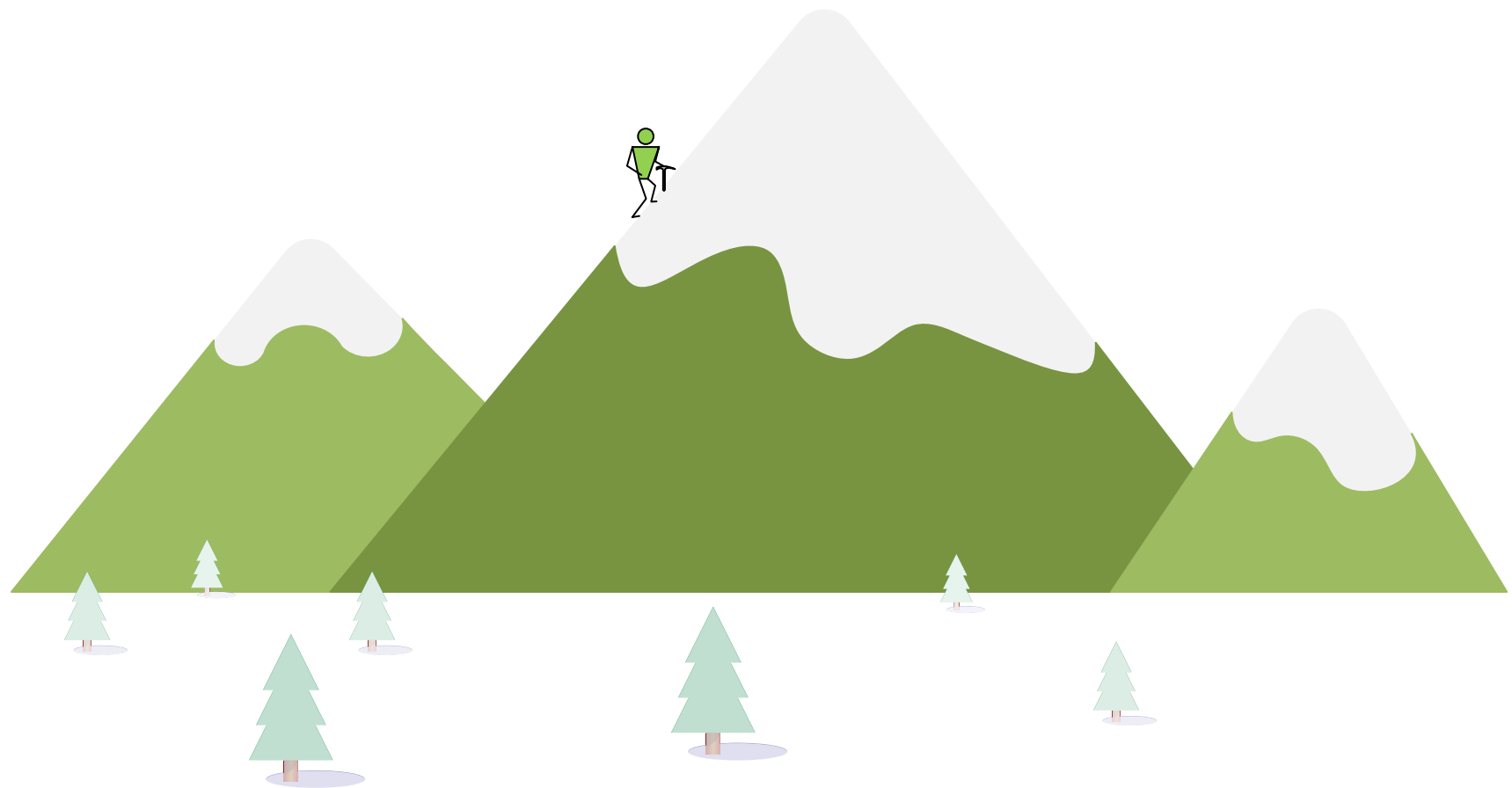


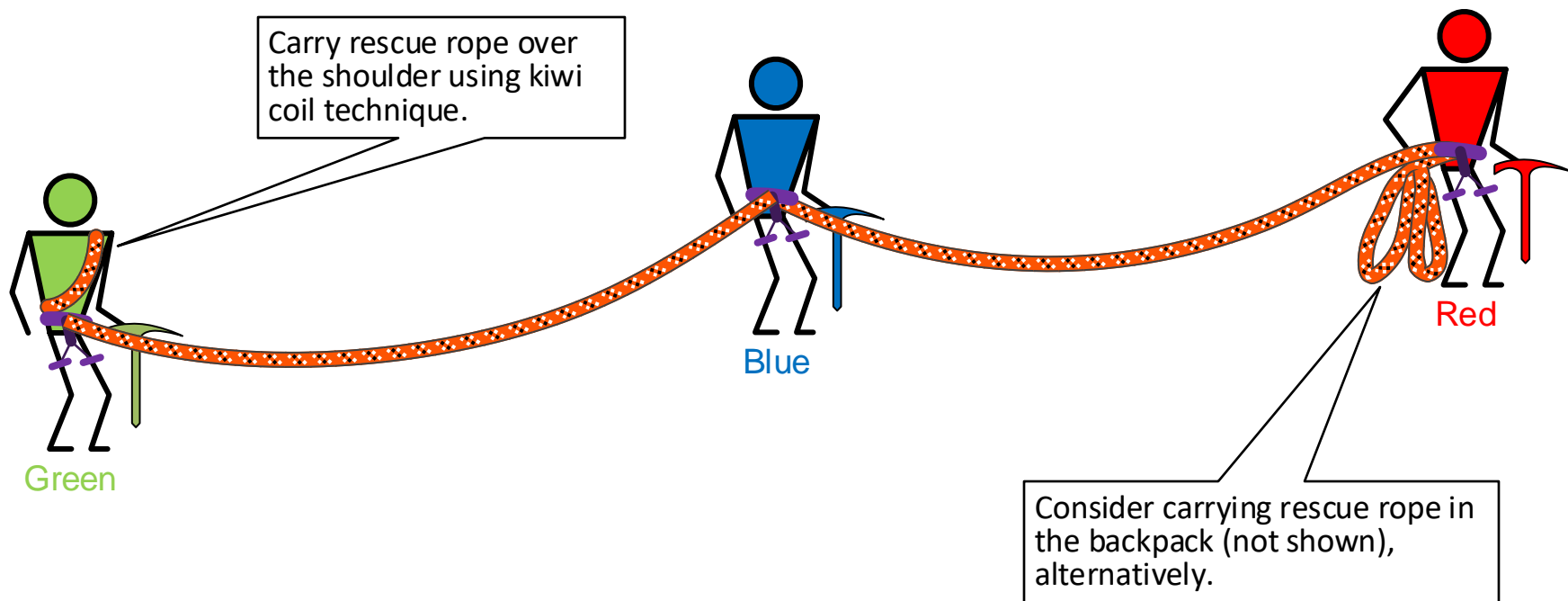
An Illustration of Crevasse Rescue

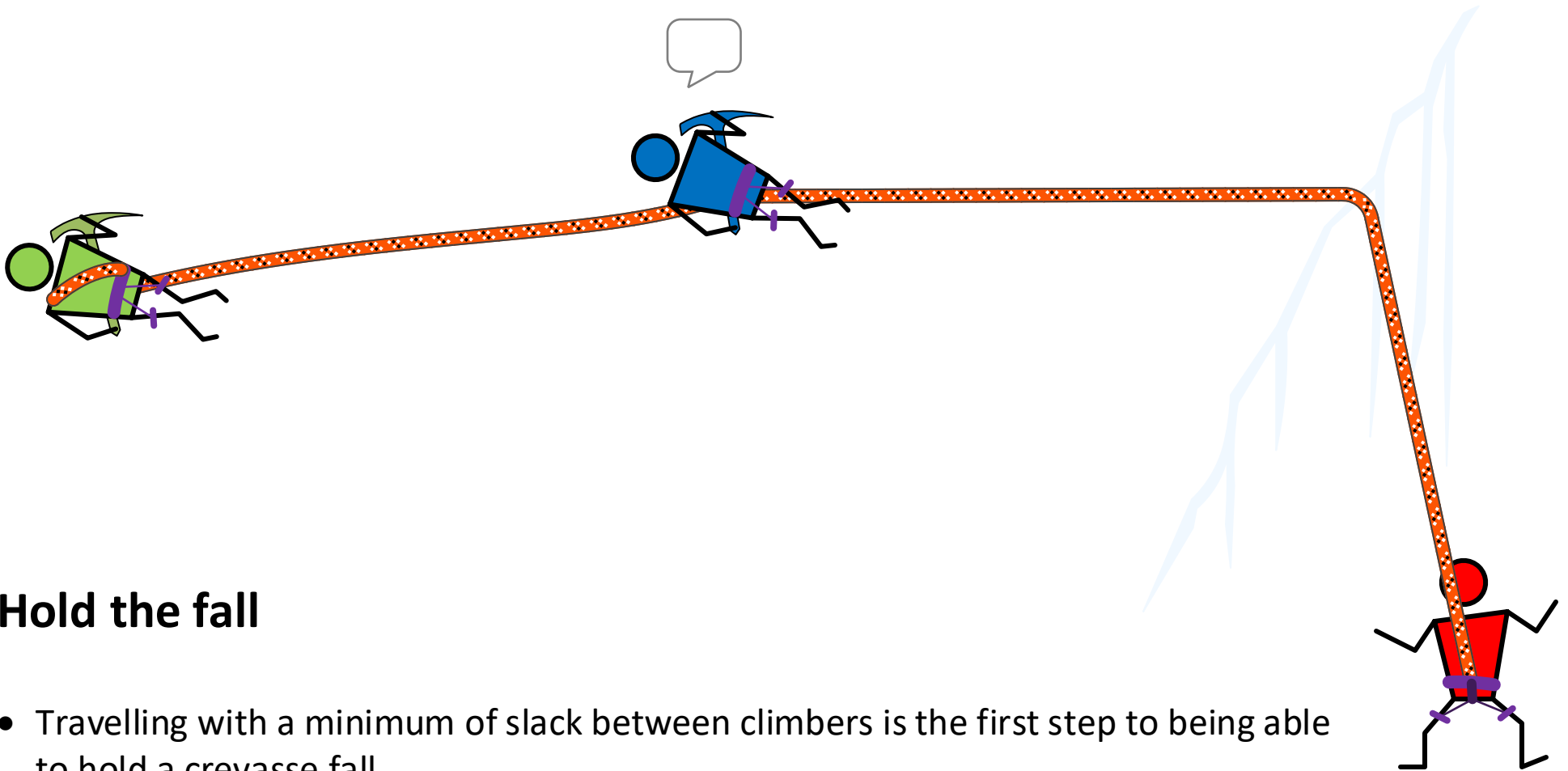
Revision 8. Nov 27th, 2021
Author: Deling Ren



Rope up for glacier travel

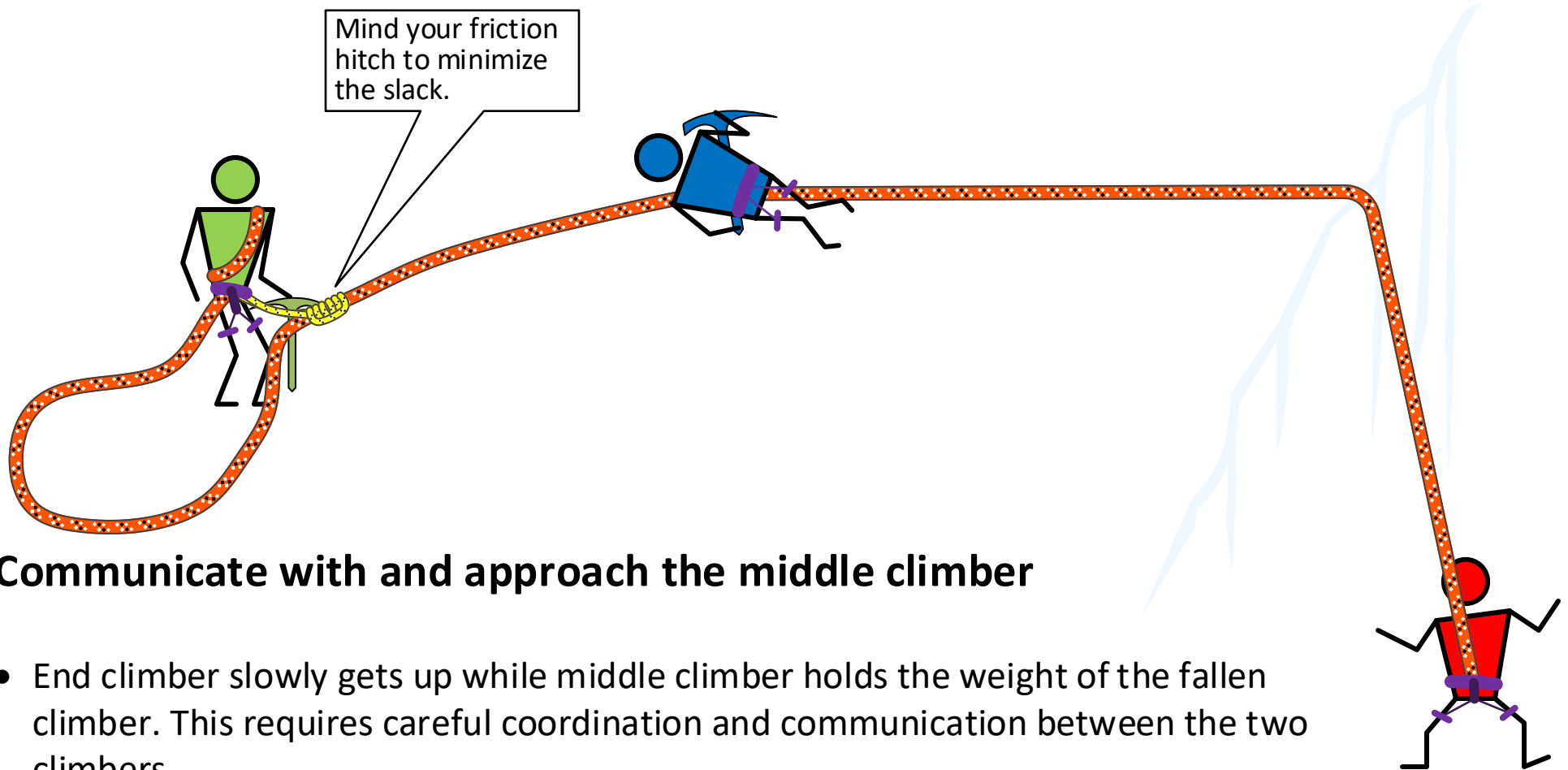
For a rope-team of 3 climbers, divide the rope into 4 segments, each approximately 10 meters (typical in the season of basic climbs in Washington Cascades). Both end climbers carry at least 1/4 of the rope (aka. rescue rope). Either carry the rescue rope in the backpack or coil it on the shoulder.





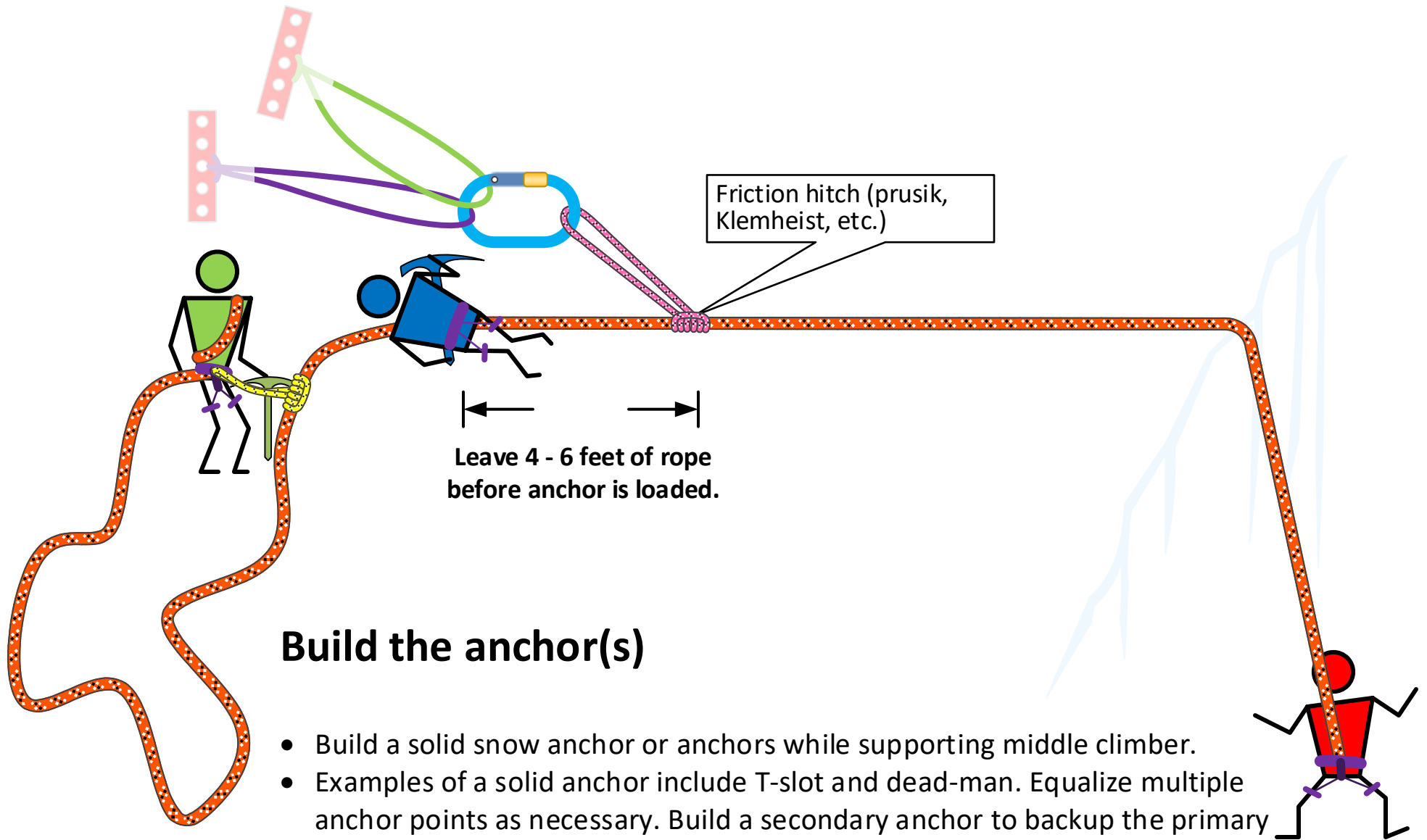
Hold the fall

- Travelling with a minimum of slack between climbers is the first step to being able to hold a crevasse fall.
- Should a fall occur, fall away from the fallen climber into the self arrest position, and kick your feet into snow for stability and strength to fallen climber's weight.
- If possible, the middle climber should try to communicate with the fallen climber.



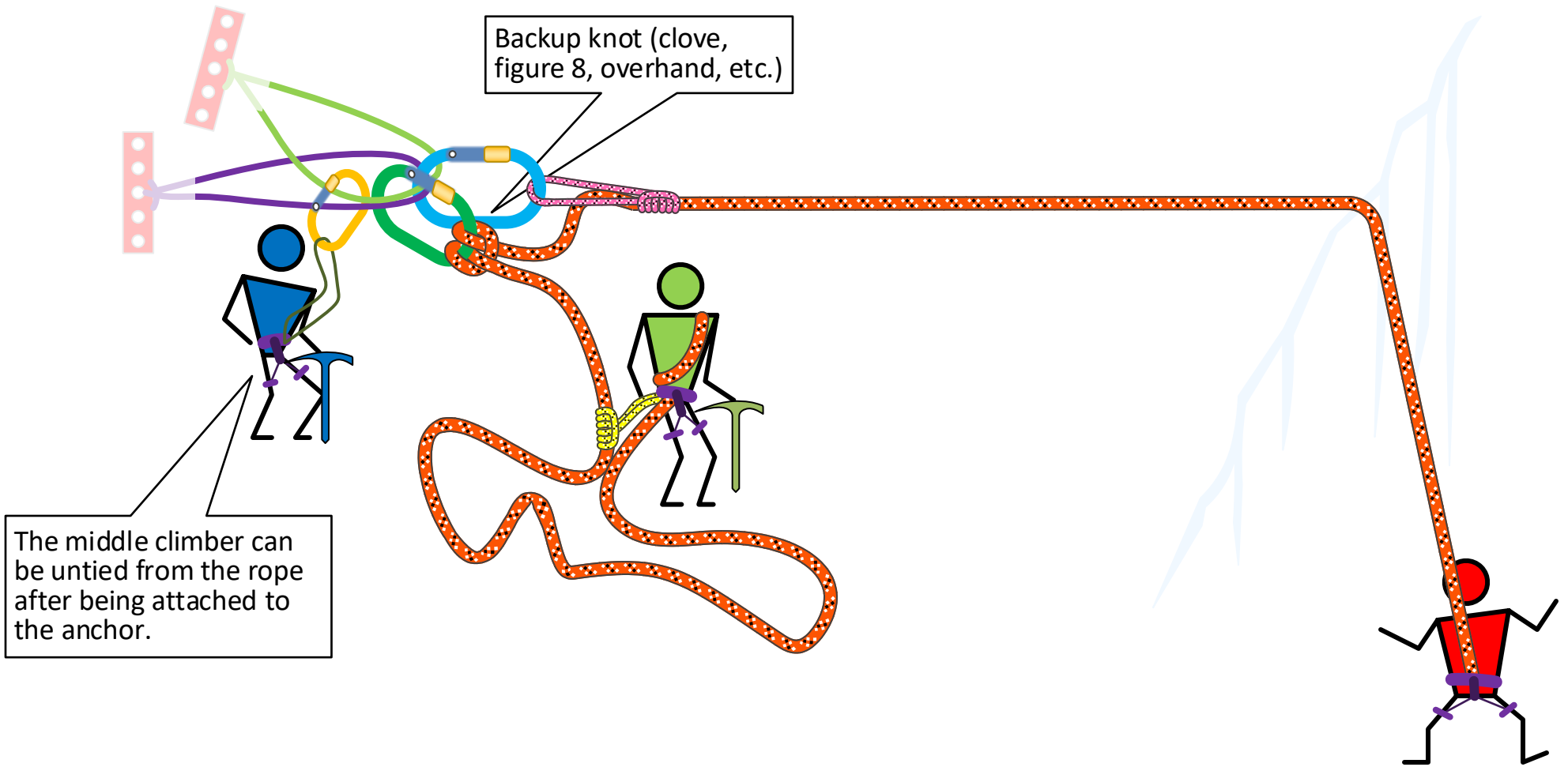
Communicate with and approach the middle climber

- End climber slowly gets up while middle climber holds the weight of the fallen climber. This requires careful coordination and communication between the two climbers.
- Approach middle climber carefully while probing for crevasses and mind your friction hitch to minimize the slack.
- Be ready to arrest again should the middle climber slip.



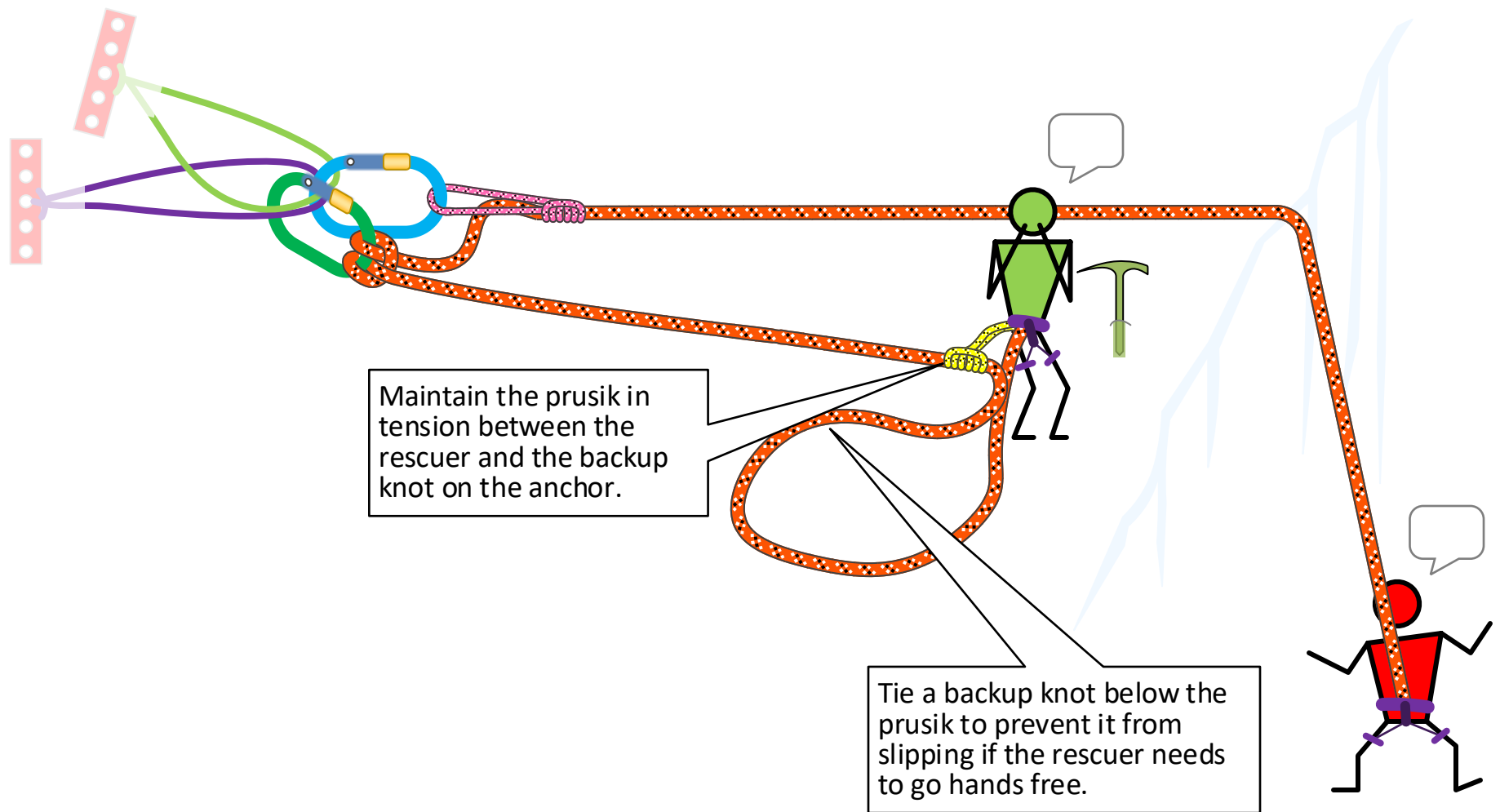
Build the anchor(s)

- Build a solid snow anchor or anchors while supporting middle climber.
- Examples of a solid anchor include T-slot and dead-man. Equalize multiple anchor points as necessary. Build a secondary anchor to backup the primary anchor. Make sure each anchor does not impact the security of other anchor(s) if it were to fail.
- Connect the rope going to the fallen climber to the anchor using a friction hitch or rope grab, 4'-6' away from the middle climber's tie-in point.



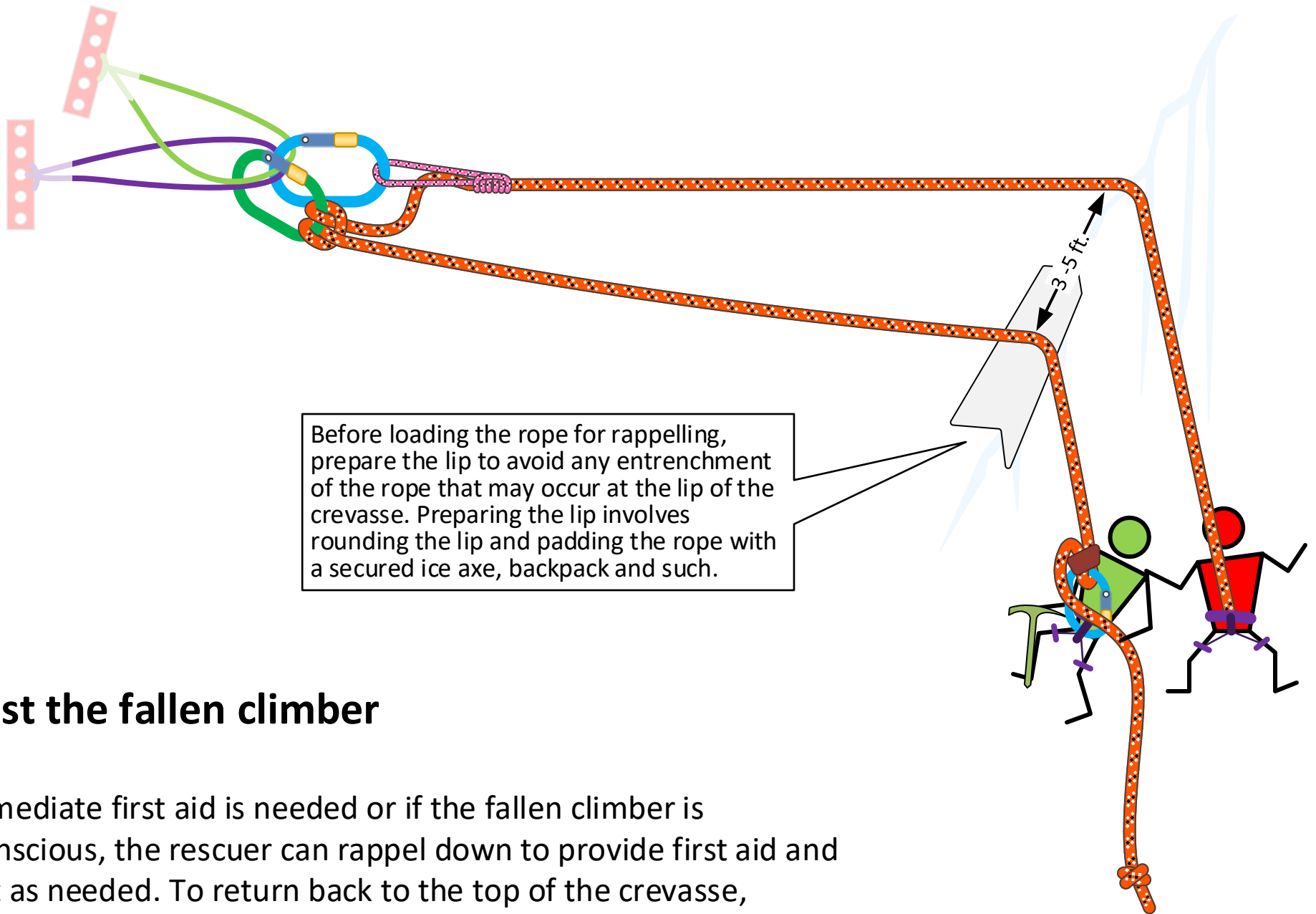
Backup the friction hitch

- Transfer weight from the middle climber to the anchor by slowly getting up.
- Backup the friction hitch by tying off the loaded rope directly to the anchor.



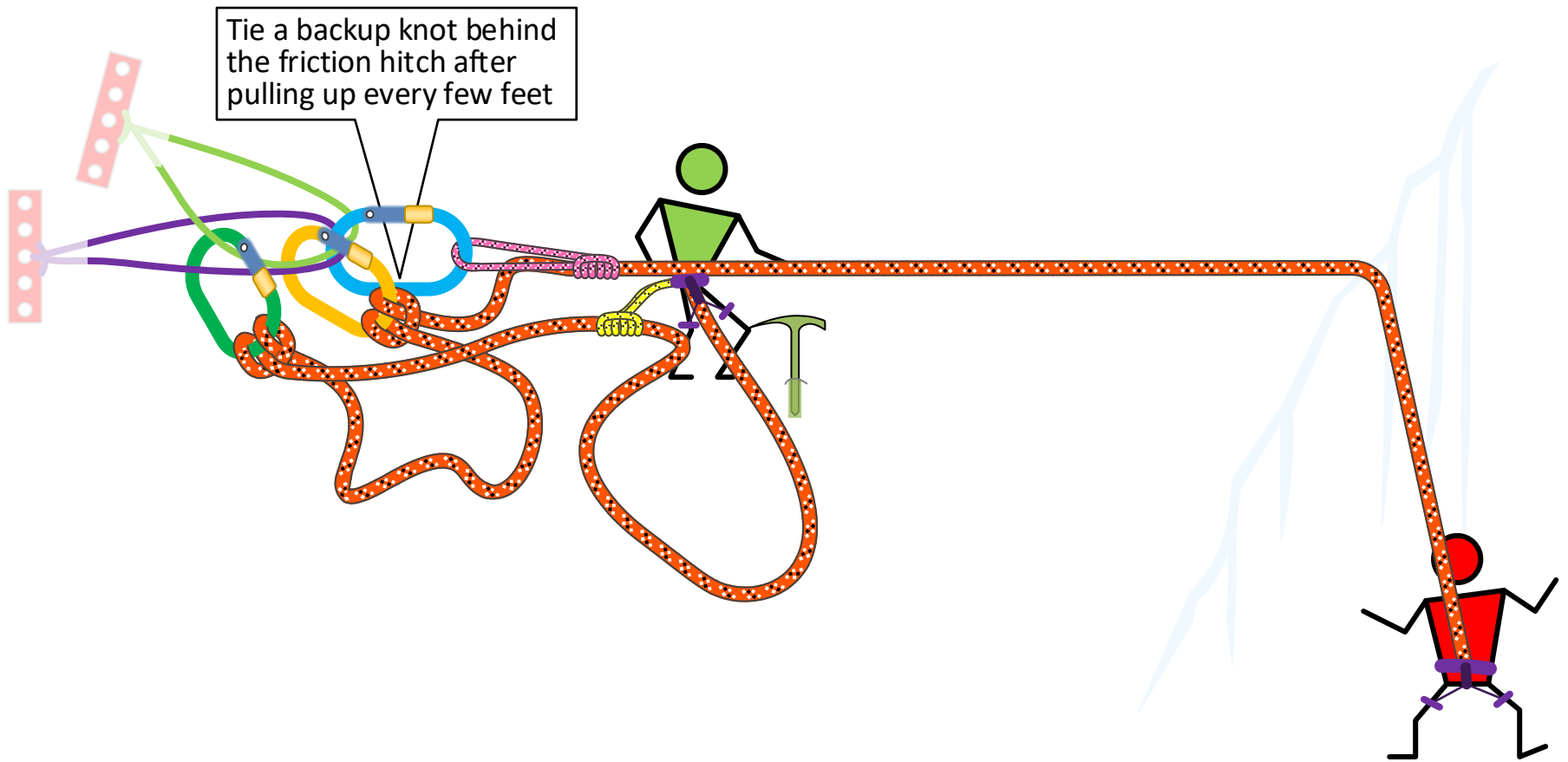
Communicate with the fallen climber

- Safely approach the crevasse by self belaying off the anchor and probing for additional crevasses.
- Communicate with the fallen climber and assess the situation.



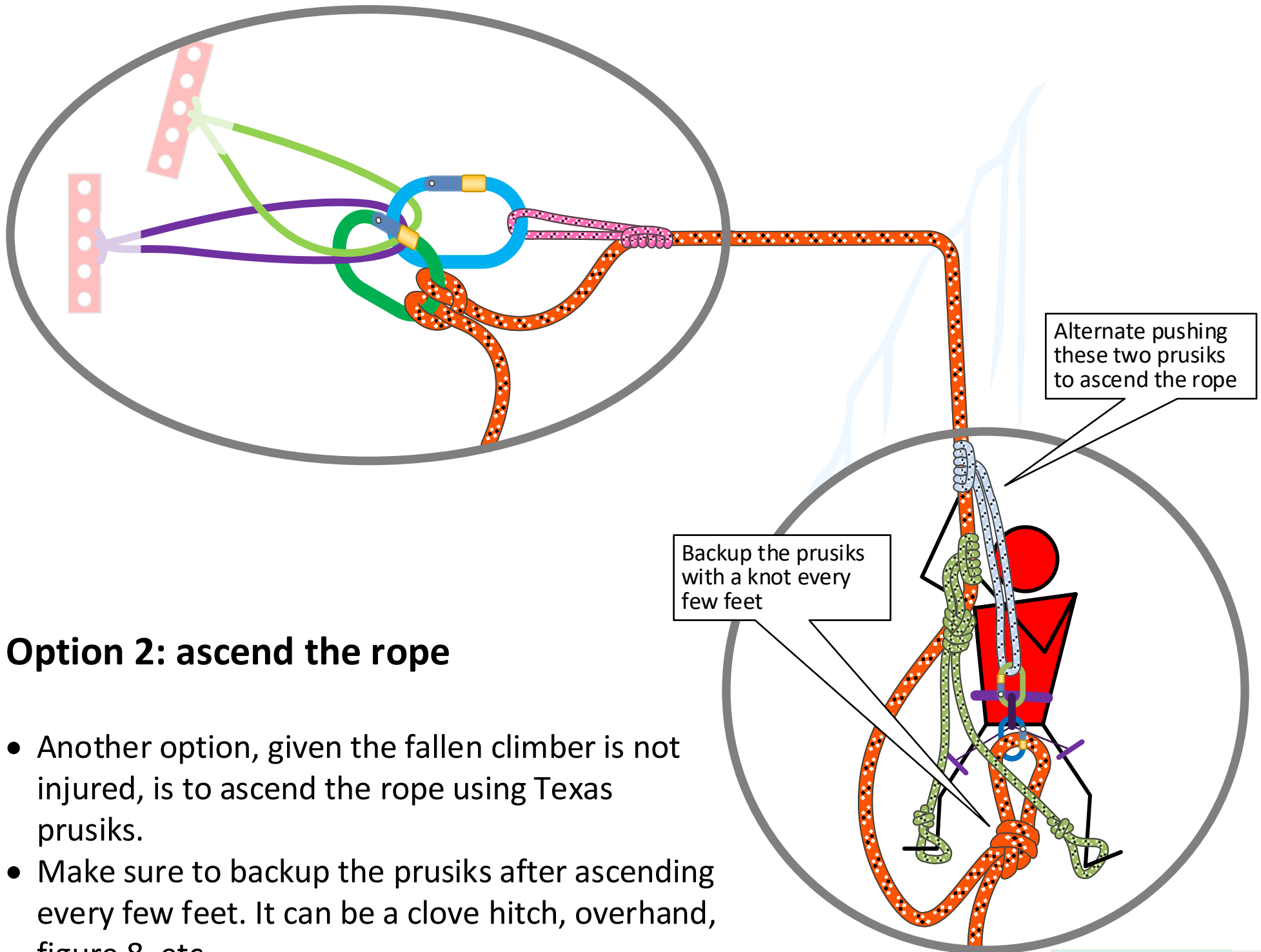
Assist the fallen climber

If immediate first aid is needed or if the fallen climber is unconscious, the rescuer can rappel down to provide first aid and assist as needed. To return back to the top of the crevasse, consider using rope ascension technique shown on page 10 of 12 of this document.



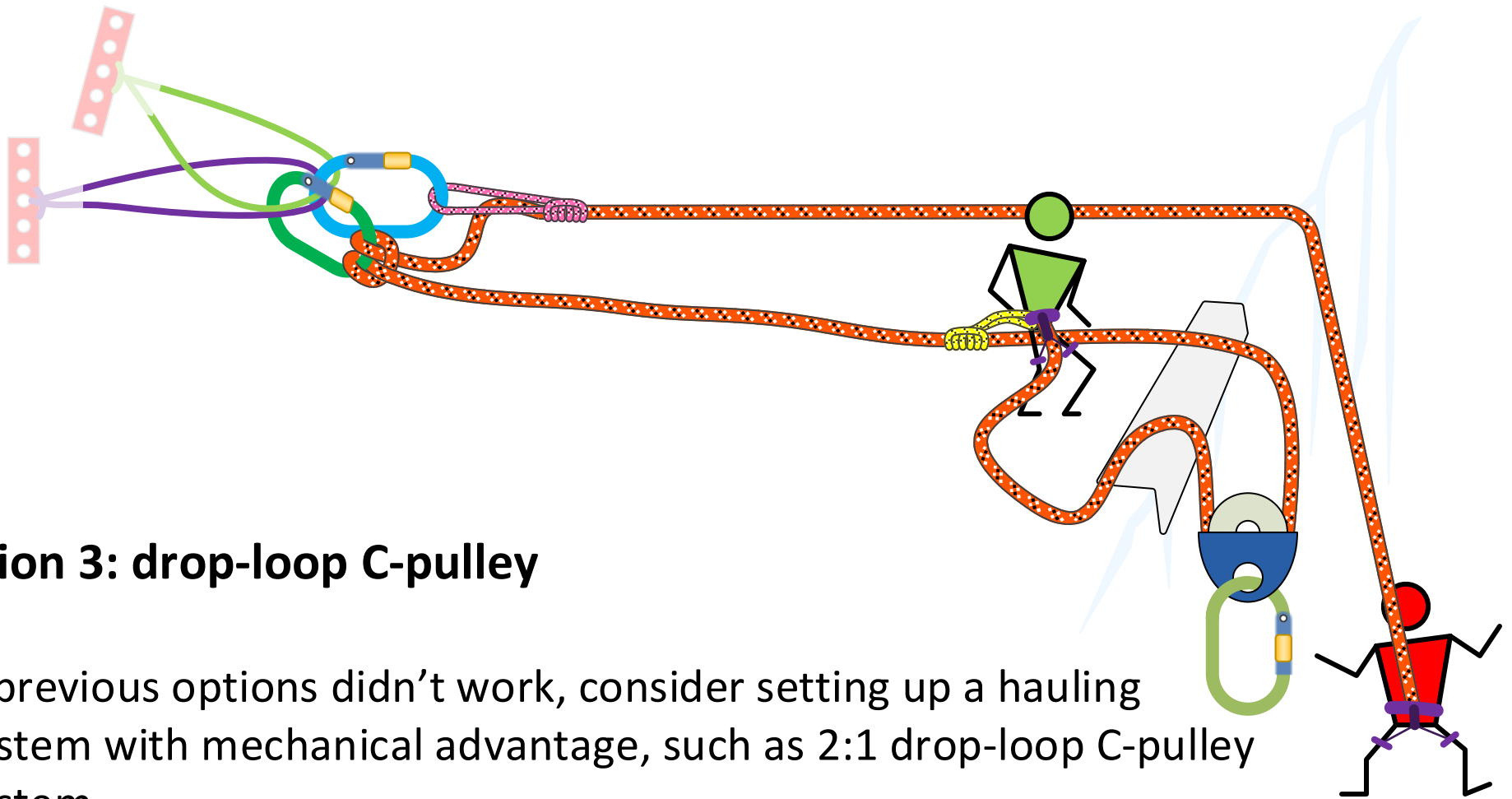
Option 1: direct pull

Before rigging a complex raise system, consider easier alternatives. especially if you have other climbers nearby to help. One simplest option is direct pull, if the terrain is mellow and the fallen climber is conscious and able to help themselves.



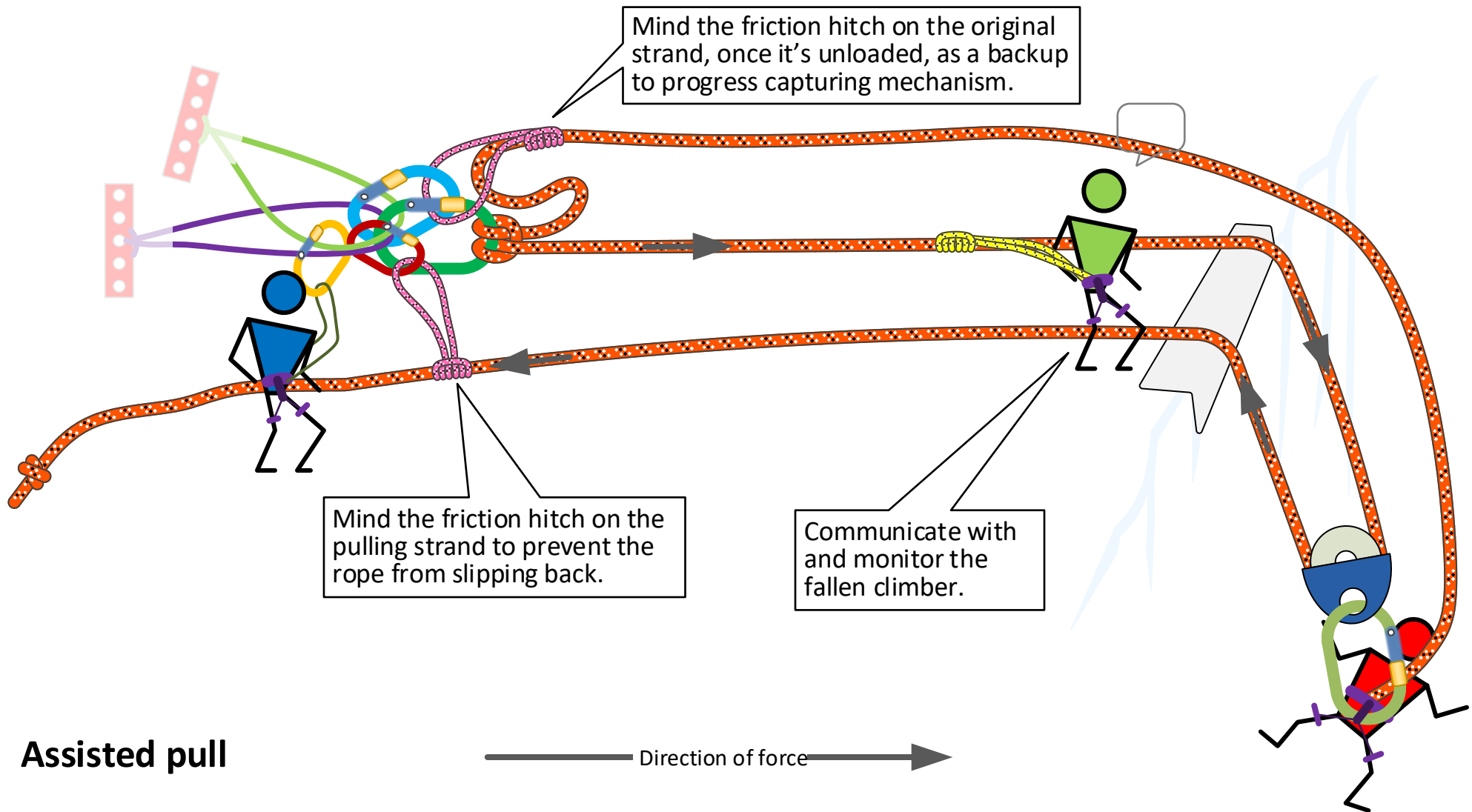
Option 2: ascend the rope

- Another option, given the fallen climber is not injured, is to ascend the rope using Texas prusiks.
- Make sure to backup the prusiks after ascending every few feet. It can be a clove hitch, overhand, figure 8, etc.



Option 3: drop-loop C-pulley

- If previous options didn't work, consider setting up a hauling system with mechanical advantage, such as 2:1 drop-loop C-pulley system.
- This may require extra rope length. This is where the rescue rope (kiwi coiled over the shoulder or carried in the backpack, see page 2) comes into play.
- Prepare the lip by rounding the lip and padding the rope with a secured ice axe, backpack and such to protect the rope from entrenchment.



Assisted pull

————— Direction of force —————>

- Be careful! Should the fallen climber be jammed up while being raised, it would be easy to injure them with the mechanical advantage.
- If possible have one person stationed and safely anchored near the crevasse, where he/she can communicate with and monitor the fallen climber during the raise.
- To avoid dropping the fallen climber and shock loading the anchor, a progress capturing system should be employed. This can be a friction hitch on the pulling strand, and taking the slack out using the friction hitch already on the original strand going to the fallen climber. This is executed by pushing the prusik down as the climber is being pulled up to minimize slack.