





Vertical Stage 3 Plan Basic Vertical Skills

Outdoor Adventure Skills Activity Resource




Suitable for	Organiser Skills	Specialist Skills	Duration	Location
 Scouts–Venturers	 SA + Abseiling Skills on demand or Vertical Stage 5	 Vertical Guide or Commercial Operator	 90-120 mins	 Scout Hall Indoors

A starter activity resource for learning basic vertical skills prior to a future outing to a climbing gym or abseiling tower.

Who this is for

Leaders and Youth supporting youth members in delivering the Outdoor Adventure Skills for **Vertical Stage 3**:

- Adult Leaders — Youth Program Leaders with Scouting Adventure.
- Youth two-down — with **Vertical Stage 5+** (any of abseiling, climbing, caving, or canyoning).

These two roles can verify **Vertical Stage 3** proficiency statements, before overall Stage sign-off by the Unit Council. A useful tool to help with assisting youth members during this process is the  guidance statement popup in the Scouts | Terrain app next to each proficiency statement. That should provide discussion points with which to engage the youth member.

Tips for Leaders supporting youth members to Vertical Stage 3

- This is a starter resource. If run as described it should meet the listed proficiency statements. However, it should be customized to suit your available resources, intended outing, and youth members' needs.
- Any Leader with the training listed above can deliver parts of this activity. However the specialist vertical components need to be delivered by vertically trained personnel, such as at a climbing gym or on a Scouting activity.
- Most of the **Plan** topics at **Vertical Stage 3** are covered in the **Abseiling Skills on demand training** module available on training.scouts.com.au. Recommend completing prior to running the activity to improve your knowledge.
- Artificial abseiling walls >10 metres are rare. Many Scout Parks and Halls reach only 8 metres. Use your judgement, and don't get too caught up on the difference between 8 and 10 metres. They're both very high up and equally challenging for first-timers.
- Some venues may not be able to accommodate all skills at this stage. A place that only has bouldering or auto belays might not be appropriate for belay skills and a supplementary activity, such as crate stacking may be required.

Example youth program

Two partial-nights in the hall preparing for a vertical outing. The outing should be a climbing or abseiling activity.

Resources required

People:

- Adequate people familiar with tying vertical knots and their uses (see above).

Equipment:

- Any rope for knots
- Some examples of solid trees and not-so-solid trees for anchors or other appropriate structures or rocks.

Locations:

- Scout Hall
- Climbing gym or vertical adventure playground designed for young people, or Scouting activity.

Schedule

Time	Duration	Activity	Lead	Assist	Organiser
07:30 PM	00:05	Opening Parade			
07:35 PM	00:20	Activity: Vertical knot tug of war			
07:55 PM	00:15	Discussion: Patrol pre-trip planning			
08:10 PM	00:20	Activity: Selecting anchors			
08:30 PM	00:25	Activity: Vertical first aid scenarios			
08:55 PM	00:30	-			
09:25 PM	00:05	Closing Parade			
Future Activity		Outing: Climbing or abseiling activity			

Activity: Vertical knot tug of war

Teach Scouts how to tie vertical knots and their purpose, then test them through a knot tying relay.

Stage 3: Do > I have correctly tied a rethreaded Figure-of-8 knot, Alpine butterfly knot and a Tape knot and can apply them to a vertical activity.

People	Resources	Duration	Location
1 leading for any youth members	Rope (synthetic for practice), climbing webbing (Improvise using ratchet strap with metal removed.)	20 mins	Indoors

Part 1: Learn knots for vertical activities.

Check what vertical knots patrols remember from other stages and see if they can still demonstrate them.

Knots to tie and some purposes in vertical activities:

- Figure-8 rethreaded - used to attach the end of a rope to an object, such as a harness belay loop, without a carabiner.
- Alpine butterfly knot - to create a rope attachment in the middle of a rope, such as for a belay device.
- Tape knot - to join two pieces of tape together, such as for creating a tape loop to form an anchor around a big tree.

This video shows the tying method for the knots at this Stage: <https://youtu.be/Fc0IQSUu8Q0>

Part 2: Tug of war knot strength test.

Once the Scouts know the knots, they **must** apply them during an activity without any guidance. When tied correctly these knots are some of the strongest knots. test the strength of your knots with a patrol tug of war. Alternatively use a knot relay or apply in the anchor activity.

Each patrol has a piece of webbing, and a long tug of war rope.

1. Patrols tie their webbing together creating a loop to be the tug of war middle mark.
2. Patrols tie their long rope to the webbing loop with a rethreaded figure-8.
3. Alpine butterfly knots are tied into the long rope to be used as handles.
4. Start with 1 Scout pulling from each patrol, each round adding another Scout to increase the force testing the knots.
5. Discuss the knot strength at the end.
 - Inspect knots as they tie them, if incorrect it presents a learning experience for discussion.
 - Start each round with a gentle pull to check the knots are secure (not slipping).

Safety warning: Thin ropes cut hands! For the Tug of war activity the rope used must be thicker than an adult thumb. It is recommended to use the thickest natural fibre rope you have in the hall (traditional tug of war rope), it will also make untying the knots after they have been tested easier. Rope must not be wrapped around hands when pulling.

Knot discussion factoids:

- If you managed to break your rope it was probably in or close to a knot, or it was a natural fiber rope not a special climbing or abseiling rope. If so, how many Scouts did it take to break?
- Because knots are formed by bending and twisting the rope, knots reduce the strength of the rope.
- It's different for every knot but we like to assume knots reduce the strength by up to ~50%.
- Neat knots are easy to check for safety and easier to untie after use. Messy knots are not.

Discussion: Patrol pre-trip planning

Patrol Leaders are to lead small patrol level discussions to address the following statements.

Stage 3: Plan > I know what the risks are for participating in a vertical activity in different weather conditions.

Stage 3: Plan > I can explain the importance of wearing the right clothing and gear while participating in a vertical activity.

Stage 3: Plan > I know which items I should carry with me when participating in a vertical activity.

Stage 3: Plan > I know how and where to get the latest weather forecast for the area I will be climbing in.

People	Resources	Duration	Location
1 youth leading a patrol	List of questions	15 mins	Inside

Patrol Leader to lead discussions for their Patrol to answer these questions:

1. What do we know about our upcoming vertical outing?
2. What are the risks of participating in a vertical activity in different weather conditions? Wet? Hot? Cold? Thunder?
3. Where do we get the latest weather forecast for the area we might be visiting?
4. Use three different weather apps to check the weather forecast for your activity location and a nearby town, compare them as a patrol. One person should check BOM weather the national weather service.
5. If weather reports don't match, which one do you prefer and why? How will we prepare for the one we don't like?
6. Why is it important to wear the right clothing and gear while participating in a vertical activity?
7. What items should we carry with us when participating in a vertical activity?

Activity: Selecting anchors

Teach Scouts the concept of an anchor for vertical activities. Going outside you can pick big sturdy trees next to imaginary 'cave entrance' holes in the ground, or a cliff.

Stage 3: Plan > I can point out a good anchor for a rock activity.

People	Resources	Duration	Location
1 leading for any youth members	None	20 mins	Outdoors

Part 1: Selecting anchors

Explain to the Scouts what an anchor is:

- An anchor is one (or multiple) sturdy objects that we can tie our ropes to.
- Anchors need to be strong enough to withstand both our weight, and also the shock loading when we fall.
- Abseiling, climbing, caving, and canyoning all regularly use natural and artificial objects as anchors.
- Multiple anchors are usually joined together to create a stronger anchor in the direction we need to pull on it, and in case something on one of the anchors breaks.
- Carabiners are often used to connect people and ropes to anchors. They need to be free from damage, correctly working, closed and pulled in a straight line.

Ask the Scouts to roam around the property and choose a good anchor point for our imaginary abseil into our imaginary cave, and then come back once they have selected something. Take the group around to each chosen anchor one by one. Without causing damage, where appropriate test the strength of the anchor. If anchor is not appropriate, discuss why not. Here are some general discussion points:

- **What do you think makes a good anchor for a vertical activity?** [something very strong that isn't going to break under the load from a fall]
- **Can you point out a good anchor point?** [big sturdy tree, big solid rocks, 4WD vehicle]
- **What sort of things are poor anchor points?** [little trees, dead trees, logs, flimsy fences or railings, crumbly rocks, anything with sharp corners or sharp, shallow boulders that a tape can slip over the top, small boulders that wobble when tested or can be uprooted]
- **Learning to select good anchors is a skill, and is part of higher Stages.** It is important that you are taught by an appropriately qualified specialist.
- Discuss minimal impact and avoiding ringbarking trees by protecting them or using something other than a tree.

Part 2: Testing anchors (optional)

For the objects that make appropriate anchors (like big strong trees), Scouts can apply their knots and rig up the anchor, by tying webbing or a rope around it and giving it a pull in the direction of their pretend cave or cliff.

Activity: Vertical first aid scenarios

Practice giving basic first aid for a vertical activity. While these Vertical proficiency statements are duplicates of Bushcraft Stage 3, they should be contextualised to a vertical activity.

Stage 3: Do > I know what DRSABCD stands for and how to apply it in first aid situations.

Stage 3: Do > I know how to treat cuts and minor bleeding.

People	Resources	Duration	Location
1 leading for 3+ youth members	Water, band aid, irrigation syringe, tweezers, improvised bandage.	~20 mins	Indoors

First Aid treatment for rope burn is the same as any other burn. Revise the first aid guidelines for minor burns, and how to clean and cover a grazed leg (see www.anzcor.org), Remember scrapes with dirt in them (dirty wounds) need to be cleaned unless there is life threatening bleeding.

Part 1: Discussion

The most common vertical injuries are weather and environment related like sunburn. Because we use ropes, friction burns (rope burn) are also possible if we are not paying attention. Some rocks are rough like sandpaper, occasionally we get small abrasions on arms or legs. Ask Scouts what they think the treatments are for these types of illness or injury.

Part 2: Scenarios

In patrols, give Scouts first aid scenarios to set up and then treat. Pretend that 1 Scout is injured, and the patrol needs to come up with the solution and treat the injured person.

<p style="text-align: right;">A</p> <p>You have been out all day abseiling in the sun. Your friend suddenly tells you they feel very tired, and dizzy. they feel hot to touch and are sweating.</p>	<p style="text-align: right;">B</p> <p>You have just finished an amazing day out on your vertical adventure and are packing up ropes. Two of your friends are trying to race the leaders and see who can coil ropes fastest. Without realising it two people are coiling the same rope and it gets pulled out of your leader's hand very fast and they now have a red mark across their palm.</p>
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C	<p>During your rockclimbing activity your patrol is approached by some nearby climbers. They have come over because they did not bring a first aid kit with them and they want some help. They tell you that the climber managed to lose balance when not paying attention and you can see a three finger-width abrasion (scrape) on the left forearm. It's not bleeding much but you can see some dirt in it.</p>	D	<p>You are on a canyoning expedition and have been sliding down rocks like water slides all day. The Patrol Leader took off their helmet when they shouldn't have and lost it earlier in the day. After sliding down one of the rock slides the Patrol Leader has a small bump on their head, You look down and see they are bleeding quickly from their right ankle.</p>
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Scenario answers: A) Heat exhaustion (hyperthermia), B) Minor rope burn, C) Minor cut that needs cleaning, D) Minor bleed.

Outing: Abseiling or climbing activity

Scouts participate in a vertical climbing and/or abseiling activity run by a skilled person.

Stage 3: Plan > I know the safety rules for participating on climbing wall or ropes challenge course.

Stage 3: Plan > I understand the need for belays in relation to vertical activities.

Stage 3: Do > I have taken part in at least two vertical activities at this Stage.

Stage 3: Do > I have climbed or abseiled a 10 metre wall at this stage.

Stage 3: Do > I can demonstrate how to correctly care for carabiners and explain why it is important.

Stage 3: Review > I have discussed with my Patrol ways that we can improve the safety of our rock-based activities.

People	Resources	Duration	Location
1 leading for any youth members. (supervision ratio guided by activity provider)	As supplied by facility (harnesses and/or helmets)	120 mins or longer	Professional climbing gym, or Scouting activity abseiling tower

1. Participate in the activity safety briefing.
2. Following the activity: Review activity as per the proficiency statements above.
 - a. Improving safety: Focus on something that was forgotten about rather than creating excessive rules.
3. Review the purpose of belays in vertical activities.
 - o **Big falls are dangerous, even deadly. They can happen even if our anchors are very strong. How could we prevent climbers or abseilers from falling if they make a mistake?** A belay line. This is a second rope that connects to our harness, and a belayer can catch our fall, even if we panic and let go altogether.

Additional information:

These Vertical proficiency statements require access to Stage 1 youth. It may not be practical for every Scout to be able teach these skills when there are few Stage 1 youth available. If not practical, have peers work together or pretend to teach each other.

Stage 3: Do > I have helped a Stage one scout learn to adjust his or her helmet.

Stage 3: Do > I can teach the importance of the buddy system to a younger Scout.

Where possible, complete these as part of the Outing activity

Good anchor example

Poor anchor example

