

75: tangled webs

teachers' notes

1) Knot tying is a popular easy-to-organise hands-on activity that can be run in almost any setting. All you need is a class set of lengths of rope or cord. I cut old climbing rope into approximately 1.5 metre lengths. (Old abseiling rope is a bit too stiff.)

2) A good way to teach knots is like in the first 2 diagrams on page 75 of Footprints, using several bits of rope for each knot, one bit for each step in the tying. The ropes are laid out on the floor/ground in the centre of the group so that students can copy the steps with their own bit of rope.

3) In both WA & Victoria, I have run climbing as the major activity for one term of middle school outdoor education electives. Part of the assessment included tying the following knots:

- overhand loop
- figure 8 on a bight
- figure 8 rethread
- bowline
- alpine butterfly
- clove hitch
- reef knot
- sheet bend
- double sheet bend
- chain

4) See how many of the above students can tie on a single length of rope or cord.

additional activities

1) Discussion questions (based on information provided in "Tangled webs" worksheet):

1. What are 5 properties of a good knot?
2. If a new 11mm climbing rope can (just) support the weight of an unladen 22-seater mini-bus, what would happen if someone tied a knot in the rope & then tried to lift the mini-bus?
3. When you really know how to tie a knot, you could tie it with your _____ .
4. What are 2 foolish & potentially dangerous things **NOT** to do when you are tying knots?

2) Do a show & tell of different sorts of rope (e.g. kernmantel rope [with frayed end visible – see below], polypropelene rope, sisal rope, etc.)



footprints answers

3) Show films like *Cliffhanger* & *Touching the void*. Go figure why Silvester Stallone is climbing a tower at the start of *Cliffhanger* with a massive rack but no rope.

additional resource

Warild, A. *Vertical, a technical manual for cavers*, The Speleological research Council. Ltd, Sydney (1994). Even though this book is written specifically for cavers, it has loads of really good information about equipment & techniques that are common to various forms of rope-based adventuring.