

Lesson plan: Basic contour interpretation and height judgement

Introduction

Learning about contours is more than one lesson, it's a continuously developing skill. This lesson is an introduction to contours, and it has several different ideas. Use the ones that fit most with your learner

Lesson plan

- Talk with your learner about what they already understand about contours - key points are below.
- They are brown lines that join spots of equal height and show the shape of the land.
- The interval between them varies on maps depending on the terrain, most are either 5 m or 2.5 m and most maps have a thicker index contour every 5 - this does not mean any difference in the height than a normal contour.
- On orienteering maps we also use form lines, which show shapes of the land that are not big enough for a full contour.
- On orienteering maps we use tags on the downhill side of the contour to help with reading.
- Show your learner the following:
 - A steep slope
 - A gentle slope
 - A hill, one contour and several contours - help them see the difference
 - A valley/gully
 - A big depression
 - A re-entrant (single-contour valley)
 - A spur
 - A ridge
- Some of the land features drawn in brown - dot knolls, earth banks, pits, small depressions.
- Get your learner to find these things on a map and show you.
- Do a short map walk or shadow your learner and spend some time pointing out the contour shapes.
- Send them on a contour only map exercise- there is a progression to this if needed by including some other features like vegetation or tracks. Contour only on open land is easier to start with.

Recap and reflect

Go through the contour shape list again and get them to draw the contours that represent the shapes.

Tips for coach

An ideal way to teach contours is to use a sandy area and make hills and hollows in it. Get your learner to draw a map of this. On maps with large contour differences help them to see the hills and valleys, use streams if useful.

See recommended exercises at [orienteering.org.nz/coaching-and-training-hub](https://www.orienteering.org.nz/coaching-and-training-hub)

Ideal map and terrain

An area with mixed hill heights is best, not only big hills and not very flat.