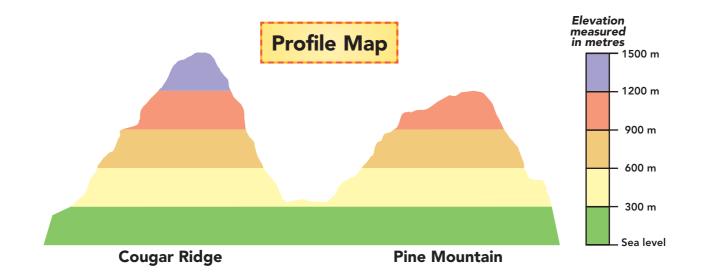


A Profile and Contour Map

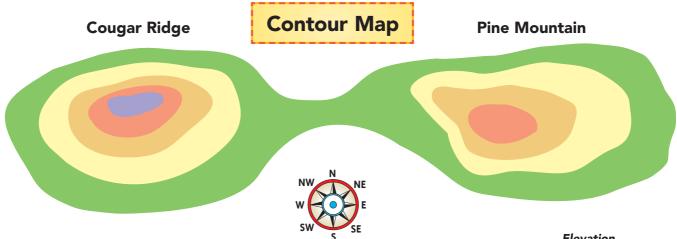
You know that mountains are high, but how high are they? The drawing on this page shows the profile, or side view, of two mountains.



he key tells you the **elevation** of different parts of the mountains. Elevation is the height of any place on land above sea level. Sea level is the average height of the ocean's surface. It is zero elevation. Land that rises 150 metres higher than sea level has an elevation of 150 metres.

- I. What does the colour yellow stand for on the mountains?_____
- 2. Which mountain is higher? What is its elevation?
- 3. What colour represents an elevation of 250 metres?
- 4. Forest rangers are building a hut at the top of Pine Mountain. At what elevation will it be?
- 5. Suppose you are climbing Cougar Ridge and are halfway to the top. What is the elevation?





he map on this page is a **contour map**. It shows the same mountains as the profile on page 372, but it shows the view from above. The lines on the contour map show the elevations of different parts of the mountains. When the lines on a contour map are close together, they show that the land is steep. When the lines are far apart, they show a more gradual slope.

Imagine you are a mountain guide planning treks up these mountains. Draw the following routes on the contour map.

- 6. For expert hikers, draw a dotted line up the steepest side of Cougar Ridge Mountain. Write the elevation at the top.
- 7. Mark a point halfway up this mountain with an X so the hikers can take a rest.
- 8. For the beginning hikers, draw a double line up the least steep side of Pine Mountain. Write the elevation at the top.

9. For an all-day hike, draw a continuous line from the lowest point on the map to the highest point on the map.

map reader

Some land on Earth is actually below sea level. For example, Death Valley in California is 86 metres below sea level. It is the lowest land in the Western Hemisphere.