

ELEVATION AND LANDFORMS

Elevation is the measure of land's height or depth above or below sea level. **Landforms** are the physical features of the landscape. Most extensive landforms have patterns of high, low, or changing elevation.

- ▶ Most vast, level landforms are sections of the relatively flat tectonic plates that make up the continents.
- ▶ High landforms are produced when plates collide and push up the earth's crust or the magma below.
- ▶ Other landforms are carved or deposited by wind, water, and living beings.
- ▶ **Relief** is the difference between the highest and lowest elevation of a feature or region. Shading on a map shows landforms with rugged relief, such as mountains and hills.



Every Breath You Take

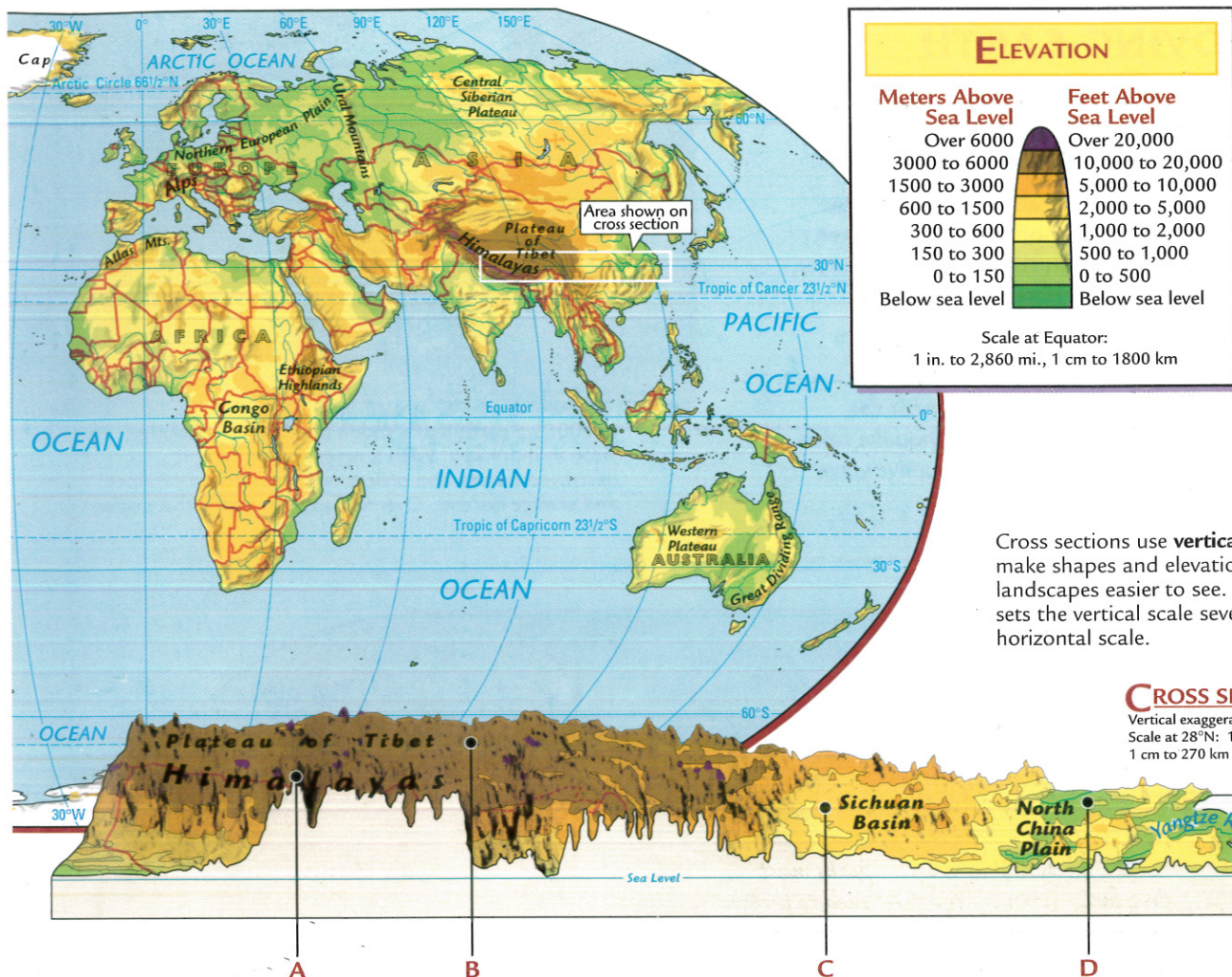
The higher you travel above sea level, the thinner the air is and the less oxygen you get with each breath. That is why climbers aiming for the world's highest peaks must first acclimatize or get accustomed to the oxygen level at one elevation range before attempting the next.



A **Mountains** can be single peaks or part of a range. The summit of Lhotse Mountain in Nepal lies at 27,940 feet (8516 meters). Lhotse is part of the Himalayas, the highest mountain range in the world. (For more information, see page 157.)



B **Plateaus** are vast areas of relatively flat land at high elevation. The Plateau of Tibet, located in China, is the world's highest plateau. It has an average elevation of more than 14,800 feet (4500 meters).



Cross sections use **vertical exaggeration** to make shapes and elevation patterns of landscapes easier to see. Vertical exaggeration sets the vertical scale several times larger than horizontal scale.



C Basins are low areas surrounded by higher ground. The Sichuan Basin, along the Yangtze River in southern China, is surrounded by rugged mountains. It has an elevation range between 700 and 2,500 feet (200 and 750 meters).



D Plains are broad stretches of nearly level land, usually found at low elevations. The fertile lowlands of the North China Plain have the best farmland in China. The elevation of the North China Plain ranges from 0 to 500 feet (0 to 150 meters) above sea level.