

## Curriculum Standards

- ▶ History and Geography– describe how geography and climate influenced the way nations live
- ▶ Continuity and Change– identify geographical features of a region

# Topography of a Region

## Introduction:

- ◆ Define the function of contour lines on a map.
- ◆ Display and examine a topographical map.
- ◆ Briefly explain the sport of mountain biking.

## Through:

- ◆ Have students make a fist and draw concentric circles on four knuckles. Explain that each circle represents a different height on the knuckles.
- ◆ Have students flatten their hands and observe how the lines represent the former height of their knuckles.
- ◆ Explain that similar lines on maps are called contour lines. They help mapmakers communicate the heights of various land surfaces.

## Beyond: Extensions

- ◆ Review how contours are used on flat maps to distinguish the altitude of a region. Contours represent areas of equal elevation. Steep areas have lines close together, shallow areas have lines farther apart.
- ◆ Distribute a topographical map. Using an overhead or a large wall map, orient the students to the physical characteristics of the area. Have students identify and interpret contour lines.
- ◆ In general terms, discuss the needs of a mountain biking course. Possible needs include: length and slope, environment (forest, rivers, watershed), access for television, spectators, etc.
- ◆ Have students imagine the ideal route through the area. Ask them to write about the course– dangerous turns, jumps, on the flat, over obstacles, etc.
- ◆ Have students draw the course across the map and then draw a cross section view.

## Resources

- [Http://www.aafra.org](http://www.aafra.org)
- [Http://macs.usgs.gov](http://macs.usgs.gov)
- [Http://www.olympic.org](http://www.olympic.org)
- Sports magazines and newspapers