

Maps

Topographic Maps

- **Topographic maps** represent locations of geographical features, such as hills and valleys
- Use **contour lines**, lines of equal elevation, to depict different elevations
- Rules of topographic maps
 - Each line connects all points of a specific elevation
 - Contour lines never cross since a single point can only have one elevation
 - Every fifth contour line is bolded and labeled
 - Adjacent contour lines are separated by a **contour interval**, a constant difference in elevation, which is indicated in the map legend
 - Scales indicate horizontal distance and are also found on the map legend

Study Tip

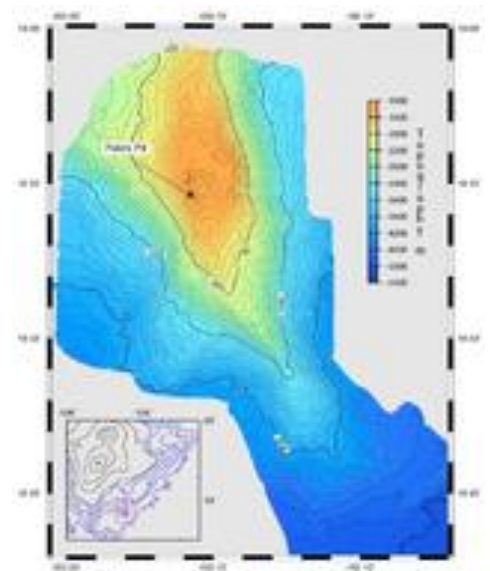
Instead of trying to remember the minor details and rules of these maps, study examples of each type of map in order to help remember their functions and uses.

Bathymetric Maps

- **Bathymetric maps** are like topographic maps with the contour lines representing depth below sea level, rather than height above
- Numbers are low near sea level and become higher with depth

Geologic Maps

- **Geologic maps** show the geological features of a region.
- Rock units, faults, and folds are color-coded and identified in a key
- Geology is superimposed on a topographic map to give a more complete view of the region.



Loihi volcano growing on the flank of Kilauea volcano in Hawaii. Black lines in the inset show the land surface above sea level and blue lines show the topography below sea level.

Concept Check

- How will a hill look on a topographic map? How will a basin look different from a hill?
- How will a steep slope look different from a shallow slope?
- How would a geologic map of the Grand Canyon look? Remember that the Grand Canyon has many layers of rocks exposed like a layered cake.