

3.3 Notes – Topographic Maps (pgs. 50-55)

- Maps that are useful in earth science are called _____ maps. These show _____ features, or topography. Most show both natural and _____ features.

Making a Topographic Map

- Topographic maps are made using a combination of _____ photographs and _____ points. _____ is the height of the land above sea level. This is measured from _____ sea level, the point midway between high and low tides.
- On topographic maps, elevation is shown using _____ lines. Each line connects points that are the same _____.
- The difference in elevation between one contour line and the next is called the _____. Relief is the difference between the _____ and _____ points of the area being mapped. When relief is high and mountainous the interval is _____. When the relief is relatively flat, the interval may only be _____ or _____.
- The shoreline of an ocean serves as a contour line for points at _____. Point A on the map on page 50 is at what elevation? _____

Interpreting a Topographic Map

- The USGS is a branch of the federal government called the _____. They make detailed maps called _____ sheets or _____. Each one covers either _____ minutes or _____ minutes depending on if it is old or new.
- What is shown in each of these colors?
 - Black = _____
 - Red = _____
 - Blue = _____
 - Green = _____

○ Brown = _____

- Draw the symbol for each of these things:

Buildings

Trail

Stream

School

Railroad

Lake / pond

Church

Bridge

Depression

Road / highway

Benchmark

Swamp

- All parallels and meridians shown are labeled in _____ and _____. On most USGS maps, the scale is _____. This means that every inch is equal to _____ feet.
- To make a map easier to read, every fifth line is made darker. These are called _____ contours and are labeled by _____. Anywhere between two contour lines has an elevation somewhere _____ the elevations of the two lines. Exact elevations are marked with _____ and labeled.
- Contour lines widely spaced apart indicate that the change in elevation is _____, and the land is relatively _____. Closely spaced lines indicate that the change in elevation is _____ and the slope is _____. When lines are touching or very close together, it is showing a _____ or a _____.
- Contour lines that bend to form a V indicate a _____. The V points towards the _____ end of the valley. If it has a stream in it, the V points _____ - stream, where the water comes from.
- Contour lines that form closed loops indicate a _____ or a depression. The closed loops showing depressions have short straight lines inside them and are called _____.