



**Ancient cratons** (also called shields) are made of small crustal plates that moved around. Sometimes, they collided to form larger areas. Sometimes, they rifted apart into separate continents. CAUTION: details are often masked by age - with a general map like this, note just the general position, not the specific shapes and arrangements of the blobs.

**Young mountains** include really high places (peaks more than a mile above sea level). Some of these young mountains are still being pushed up by earthquakes and volcanoes. CAUTION: learn just the general pattern; details cannot be shown accurately at this scale. Note just the fact of splits at some ends, not the locations of individual forks and prongs.

Cratons and young mountains often have metal ores; they seldom have oil or gas.

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This map is worth memorizing. As a mental map, it is more useful than a map of countries. For one thing, news reports often include a general map of countries. If not, it is easy to find.

**This** map can help you organize a lot of other geographic information in your mind.

For example, mountains lower temperature, influence winds, and capture rain and snow. Learning the general locations of the high mountains, therefore, can save you from having to memorize a lot of details on climate or vegetation maps. Just imagine simple east-west bands, and then adjust them for the high mountains in specific places.

This map can also help you make a lot of valid generalizations about resources.

Most **ancient shields** are now low hills. They often have metal ores. They seldom have much oil or gas. Their soils are usually not very fertile (India has a few exceptions to that rule, because fertile volcanic and floodplain soils lie on top of the shield rocks).

Most **young mountains** have steep slopes and difficult transportation. To make things worse, they often have earthquakes and volcanoes. They rarely have any oil or gas. Fortunately, the geologic processes that make young mountains can also concentrate metal ores.

To memorize this map, "translate" the positions of things into your own words.

**1. Trace the young mountains** - a single long line near the west coast of South America, a double line in North America, a blob with multiple fingers in Asia, and so forth. As it says, note the fact that some ends split, do not try to memorize the individual forks and prongs.

**2. Locate the ancient shields** - Different information sources disagree about the number and timing of events that put the smaller blobs together, so just note the general position of the groups as a whole - northeastern North America, most of eastern South America, most of western Australia, several separate areas in Africa and Asia.