

Elevation illustrated in South America

12

Very approximate grade level

R/1

2 a big geographic idea
(and a good place to study it)

Elevation
is important in South America because air that goes up a mountain gets cooler and more likely to cause precipitation.

Trace associations among highland roads, lowland rivers, and colonial activities.

Locate the mountains: spatial associations with crustal "collisions."

Match thermographs with altitude zones (tierra caliente etc.).

Learn position words: together or separate (spatial association).
(clearly identified as geography)

History: European colonialism and independence

Science: basic plate tectonics, mountain building

Science: structure of atmosphere, gases, clouds, dust, rain, snow, hail
(previous classes or collaboration with other disciplines)

Map skill: Interpret elevation contours

Map skill: Interpret thermometer graphs
(map skills)

3 some important consequences of the big idea

Elevation continues to influence where people in South America build cities and use land.

Mid-elevation parts of South America are food-exporting areas.

European explorers followed lowland rivers and highland roads.

The Inca empire was unusual -- an early civilization at high elevation.

Metal ores are associated with mountain-building processes.

Different plant covers and land uses are associated with different elevations.
(positioned where appropriate in the curriculum)

High mountains tend to be cold: they can even have permanent snow.

A discussion question:



What are some implications of cutting the vast rainforests in the equatorial lowlands of South America (especially if deforestation removes vital carbon sinks from the global biosphere)?

1 a scaffold of thinking skills and background knowledge that supports the big idea