

How the Rockies were Made

- 1) The Rockies are the _____ mountain chain in North America. And the _____ longest in the world.
- 2) It stretches from New Mexico to _____.
- 3) The Great Inland Sea existed for over _____ million years until tectonic upheaval filled it.
- 4) Ammonites, which lived in the sea, became extinct _____ million years ago, when the sea vanished. Ammonite fossils were found at _____ feet above current sea level.
- 5) The Flat Irons are tilted at more than _____ degrees.
- 6) The quantity of _____ in an igneous rock can tell geologists the depth at which it formed.
- 7) The granite of the Flat Irons was formed _____ miles below the surface.
- 8) The collision and subduction of the Pacific and North American Plates created the Rockies _____ miles inland.
- 9) Geologists think that the Rockies formed on a line where _____
- 10) Leaf fossil _____ gave clues as to the micro-climates from the base to the top of the mountains.
- 11) The ratio of _____ leaves to _____ leaves yields the temperature differences.
- 12) In a hot air balloon, for every mile you ascend the temperature changes by _____ degrees F.
- 13) Based on the leaf fossils, sixty million years ago the mountains were _____ higher than Denver.
- 14) What happened to the _____ tons of rock that were at the top of the mountains?

15) The eroded material from the Rockies filled in the basins and valleys to a depth of _____.

16) Volcanic eruptions that occurred _____ years ago covered the landscape with tephra and ash.

17) _____ and _____ completely transformed the terrain and buried the Rockies.

18) (The eroded material) washed into the _____ and _____ rivers and was transported to the sea.

19) The boulders found in the valley are composed of materials that are different compared to those on _____

20) The only force that can produce these parallel scratches, called striations, on the rock is _____ and lots of it.

21) The last ice age came to an end, about _____ years ago.

Note: “There have been at least five significant ice ages in Earth’s history, with approximately a dozen epochs of glacial expansion occurring in the past 1 million years.”, History Channel

22) Alarming new evidence suggests that the Rockies will one day collapse into a deep _____.

23) Over the past _____ years, a giant rift has been opening at the southern end of the Rockies.

24) This rift area is known as _____.

25) Travertine is a form of limestone deposited by mineral springs, especially _____ springs.

26) These _____, source of the water, form as the rift valley is pulled apart.

27) The microbes found in the water are the same as those found _____

28) Gas, collected as it bubbled up through the water, was analyzed and found to be _____

29) This particular form of gas is released as _____ rises toward the surface.