Mt. Everest is located between Nepal and China in a mountain range called the Himalayas. The Himalayan range is 1,500 miles long. In addition to Nepal and China, it also covers parts of the countries of India, Pakistan, Afghanistan, China, Bhutan and Nepal. Not only is Mt. Everest, the tallest mountain in the world located here, but so is K2, the world’s second tallest mountain. The area experiences large active earthquakes.

Weather and climate:
- tropical near the base of the mountains
- snow and ice near the tops of the mountains all year long
- 15,000 glaciers

Earth materials found here:
- sedimentary rock such as shale and limestone
- volcanic rock in some areas
- marine fossils on some of the peaks of the mountains

The name for the Himalayas comes from Sanskrit and translates to “Abode of snow.” The Nepalese people named Mt. Everest Samgarmatha, which is translated as “Goddess of the Universe” or “Forehead of the Sky.” The Tibetan name for Everest is Chomolungma, which means “Goddess Mother of the World.” These mountains are growing in height, with Mt. Everest growing about 2 cm per year.
Mount Mitchell in the Appalachian Mountains

Height: 6,684 ft above sea level  Movement: 3 cm west yearly

The Appalachian Mountains are a mountain range that covers 1,500 miles in the United States, from Northern Alabama to the Canadian border. The Appalachian Mountains are ancient, or very old. Scientists believe they used to be as tall or taller than the Himalayas.

Weather and climate
- Rain and snow is common in this mountain range
- Areas in the north can get snow all year
- Areas in the south have hot dry summers
- Some areas get heavy, fast rains that lead to flooding

Earth materials found here
- Sedimentary rock such as sandstone and limestone
- Volcanic rock in some areas
- Forests cover most of the mountains
- Grass meadows and valleys are in between the mountains
- Many prehistoric shells can be found in the rock layers of the mountains

The peaks in the mountain range are decreasing in height. Most of the valleys in between the mountains are getting deeper. There are very few small active earthquakes happening here.
Aoraki (or Mount Cook) in the Southern Alps / Kā Tiritiri o te Moana Mountains

This mountain range in New Zealand is about 300 miles long. English settlers gave it the name Southern Alps, but the local Maori people had already named it Kā Tiritiri o te Moana which translates to “the sea is divided”. The tallest mountain in this range is called Aoraki (Maori for “Cloud Piercer”) or Mount Cook (as named by the English).

**Height:** 12,218 ft above sea level  
**Movement:** 7 cm north yearly

**Weather and Climate:**
- Strong winds, rain and snow
- Western side of mountains get almost twice as much rain and snow as eastern side
- Over 3,000 glaciers
- Rocky mountains with snow and ice at the top

**Earth materials found here:**
- Forests and meadows found at the bottom of the mountains
- Sedimentary rock such as sandstone and limestone
- Volcanic rock such as granite
- Fossils of fish, shells and dinosaurs

This mountain range is increasing in height at a rate of 1-2 cm per year. Scientists believe Aoraki, or Mount Cook, should be 2 ½ times as tall as Mt. Everest based on it being older than the Himalayas. Scientists have data that shows the mountains are also getting broader, or wider. Earthquakes happen regularly off the coast of New Zealand. Recently, after an earthquake, part of the bottom of the ocean was pushed up above the water and is now dry land.

Image credits: Concord Consortium; CIA World Factbook; Falco; Makalu; Dimitris Vetsikas
Mt. Aconcagua in the Andes Mountains

Height: 22,838 ft above sea level  Movement: 3 cm north yearly

This mountain's name has roots in the indigenous Quechua words Anco (white) and Cahuac (sentinel). It is translated as “The Sentinel of Stone.”

The Andes Mountains are located on the western coast of South America. They are the longest mountain range in the world at 4,500 miles long. This is the highest mountain range outside Asia where Mt. Everest is found. The world’s tallest active volcano, Nevado Ojos del Salado, is found in the Andes Mountains, in Chilé.

Weather and climate
- Many different climates
- North areas are rainy and warmer
- The middle areas are drier
- Southern areas are cooler and get more rain and snow
- Weather changes quickly here since the mountains are so tall
- Glaciers are found in some areas

Earth materials found here
- Sedimentary rock such as sandstone and limestone
- Volcanic rock such as granite
- Salt deposits found in one section
- Rainforests
- Large saltwater lakes
- Fossils of ancient whales, mammals and reptiles

Nevado Ojos del Salado in the summer.

The world’s largest salt flat, large ground covered by salts and minerals located in Bolivia.

Ammonites fossils similar to these were found in the Andes Mountains being used as decorations in the side of a building.

Scientists believe these mountains are about the same age as the Himalayan Mountains. The Andes are still increasing in height, but go through periods of growth spurts. On average these mountains grow about 10 mm over 10 years. Earthquakes often happen in the Andes.

Image credits: Concord Consortium; CIA World Factbook; Sefej; Anouchka Unel; Laurent Arroues
**Mount Hotaka in the Hida Mountains**

**Height:** 10,470 ft above sea level  **Movement:** 1 cm southwest yearly

The Hida Mountains or the Hida Sanmyaku (飛騨山脈) are in Northern Japan. The Japanese name for these mountains means “Wild Flying Horse.”

### Weather and climate
- Winter, spring, summer and fall have different weather conditions
- Heavy snow in winter
- Heavy rainfall in other seasons with flooding

### Earth materials found here
- Sedimentary rock such as sandstone
- Volcanic rock such as granite
- Rivers, streams and lakes
- Pine meadows
- Multiple hot springs
- Rocky cliffs and deep, narrow valleys

The Hida Mountains are much younger than the Himalayas. There are several active volcanoes in the Hida mountains, including Mt. Hotaka. These mountains are growing by about 4 mm a year. Japan has more earthquakes yearly than almost anywhere else on the Earth.

Image credits: Concord Consortium; CIA World Factbook; Alipdake. CC-BY 2.0; Hirayu Spa Tourism Association via the Ministry of the Environment, Japan; David Mark
Mount Narodnaya in the Ural Mountains

The Ural Mountains extend from the Arctic Circle to the grasslands of the northern border of Kazakhstan. This mountain range separates Europe and Asia. The mountain range is 1,550 miles long.

Weather and climate
- Many different climates
- Arctic tundra found in the north
- In the north up to 7 months of winter and cold winds
- Forests and semi-desert in south
- In the south, hot and dry air with temps over 100 degrees in summer
- Glaciers in the north

Earth materials found here
- Sedimentary rock such as sandstone and limestone
- Volcanic rock such as granite
- Marine fossils and other types of fossils
- North is rocky, sharp ridges
- South is flat top mountains and deeper valleys
- Deep lakes and rivers

The tallest peak in the whole range of mountains is Mount Narodnaya, (Гора Народная, На́родна-Из, which translates as “People’s Mountain” in Russian). These mountains are about the same age as the Appalachian Mountains. The Ural Mountains are much older than the Himalayan Mountains. The Urals are not growing or shrinking in height. Earthquakes can happen in the Ural Mountains, but they are small and not common.

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