Lesson 3: Resource Sheet 1

Mountains

In Lesson 2 we looked at the distribution of the world's earthquakes and active volcanoes had a close relationship with the edges of the earth's plates. The same is also true for the world's great mountain ranges.

Where two plates collide, the earth's crust is forced up, forming mountain ranges. Figure 1 shows the location of the world's great mountain ranges—the Andes Mountains of South America, the Rocky Mountains of North America, the Alps of Europe and the Himalaya of Asia. All these mountains are found along the edges of the world's plates. As the plates press against each other, the pressure increases, and layers of rock are forced upwards.

Where plates move apart molten material, from deep within the earth's mantle fills the gap, forming mid-ocean ridges. These ridges extend through all the earth's oceans. Deep ocean trenches are formed when plates are drawn down into the earth's mantle, where they melt.

Figure 1: The Himalayas

Figure 2: Yosemite National Park in the Sierra Nevada mountains, California, USA.

Figure 1: The world's mountain ranges are shown in brown on this world map. Can you name any of them?