 Olympus Mons a gigantic (about 600 km/375 mi in diameter) shield volcano on Mars, is larger across than the length of the Hawaiian Islands strung together. The Mars Pathfinder Mission of 1997 returned data that Martian volcanic rocks appear to be similar to those found on Earth, including some evidence of the rock andesite. The volcanism on the Earths moon, Mars, Mercury, and Venus mostly occurred billions of years ago. these planetary bodies are now cold and dead. However, scientists have found evidence in Martian meteorites that indicates volcanic activity on Mars may have occurred as recent as 150 million years ago. Mars has the largest volcano in the solar system, Olympus Mons. It is 26 km (16 mi) high (almost twice as high as Earthamp.brvbar.s Mount Everest) and covers an area comparable to the state of Arizona. Near it, three other volcanoes almost as largeamp.iexcl.Xform a line running from southwest to northeast. These four volcanoes are the most noticeable features of a large bulge in the surface of Mars, called Tharsis. Another volcano, Alba Patera, is also part of the Tharsis bulge, but is quite different in appearance. It is probably less than 6 km (4 mi) high, but has a diameter of 1,600 km (1,000 mi). None of Marsamp.brvbar.s volcanoes appear to be active. The Tharsis bulge has had a profound effect on the appearance of the surface of Mars. The Tharsis bulge includes many smaller volcanoes and stress fractures, in addition to the large

volcanoes. Its presence affects the weather on Mars and may have changed the climate by changing the rotation of the planet. 