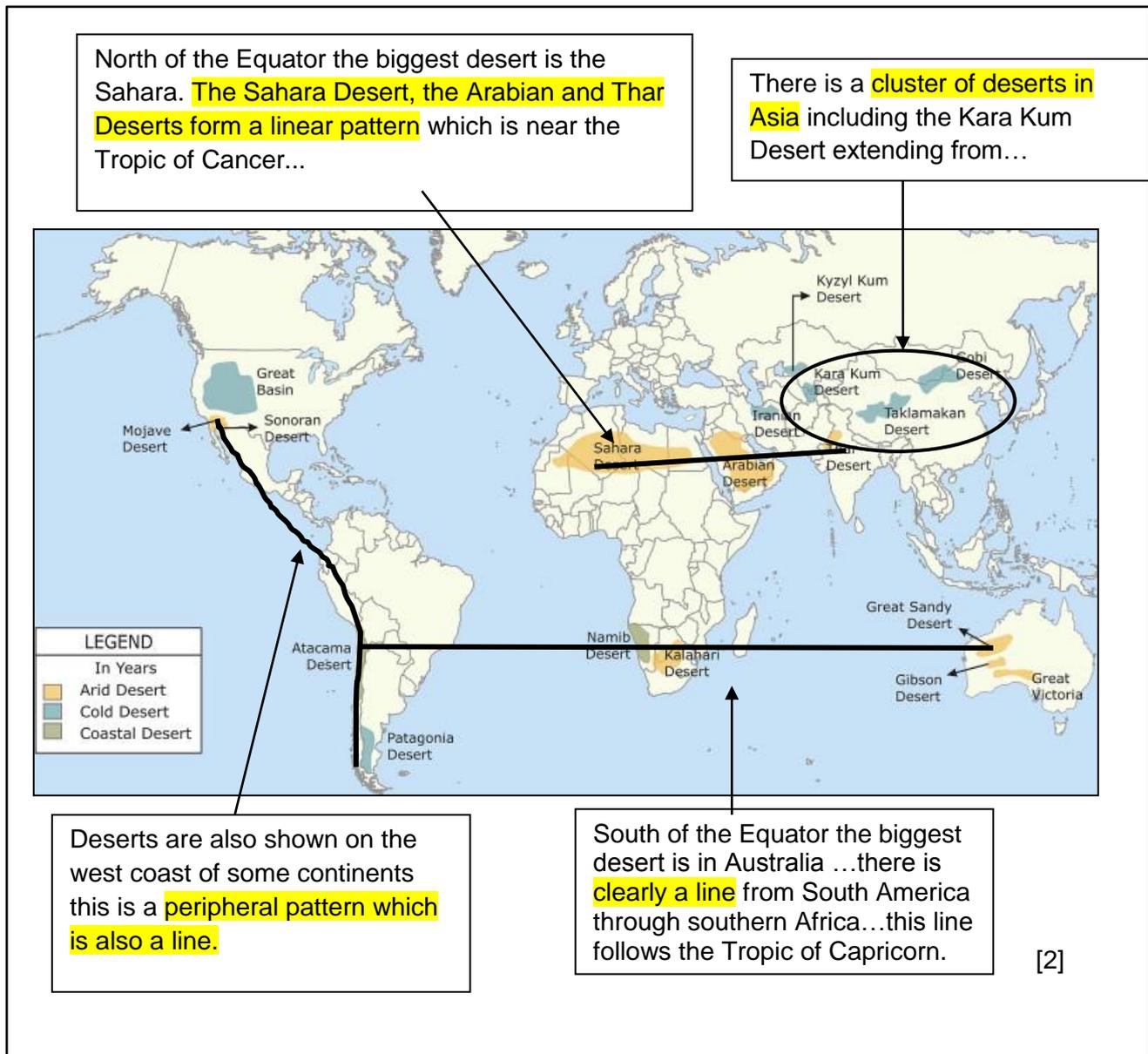


Student 2 High Merit

Spatial pattern

Most of the world's deserts are found in linear patterns around the tropics, that is latitude 25°-30° N and S of the equator [1]. There is also a linear pattern along the west coast of....



Factors and/or processes

Climate is the main influence for the location of the desert and the linear pattern.

The linear pattern of deserts is largely because of air pressure cells in the atmosphere. The belt of high pressure cells clearly matches up with the two linear patterns shown for deserts which are near the Tropics of Cancer and Capricorn [3]. The climate characteristics of a high pressure ... low rainfall and ... High pressure cells are descending dry air. As the air

descends it gets warmer and tends to evaporate moisture from the earth's surface. It brings bringing dry sunny weather. Some deserts have as little as 1mm of rain a year and other parts have no rain for years... [4] These large high pressure cells are the main influence over the desert climates... The temperatures in the tropical deserts (Sahara) are high all year round (35-45°C) with extreme differences in temperatures between day and night...

Some of the deserts in the southern linear pattern border the west coast. The deserts of Atacama and the Namib are both caused by cold ocean currents... Cold sea temperatures mean there is no evaporation ...no rainfall for the coastal land. The Benguela is a cold current from the Antarctic Ocean and it has contributed to the Namib Desert in Southern Africa [5]... Fog is the most common form of moisture and the coastal area can receive as little as 2-20mm of rain per year... but due to high evaporation...