

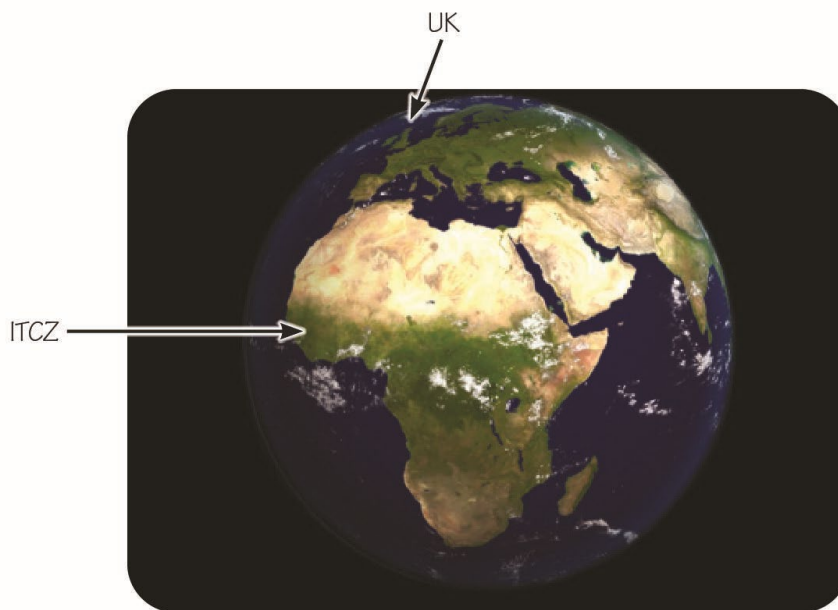
Oxford Revise | Geography | Answers

Chapter 1 The atmospheric system

All exemplar answers given are worth full marks.

1.

a) i) and ii)



- b) The climate in West Africa's ITCZ will have very high temperatures throughout the year and high rainfall totals.
- c) The surface winds, which represent the lower parts of the Hadley Cell circulations either side of the equator, meet over West Africa. These form part of the atmospheric circulation responsible for the climate pattern in this area. The sun is high in the sky throughout the year, which results in intense heating of the earth's surface, resulting in high temperatures. This causes the air to become less dense and to rise in the form of convection currents. This rising air contains water vapour, which condenses back into water as the rising air cools when it reaches higher altitudes. This then falls as heavy convective rainfall.

2.

- a) The significance of the North Atlantic Drift to the climate of the UK is that it makes the climate much milder than other areas at the same latitude. Warm water is brought up from the Gulf of Mexico by the North Atlantic Drift, and so then when the prevailing south-westerly winds blow over the warm ocean current it brings warm and wet weather.