

For centuries, mankind has found it useful to divide up the world using the ideas of longitude and latitude. These are imaginary lines that circle the world in an east-west direction for latitude and a north-south direction for longitude. The most well-known lines of latitude are the equator, which marks a line of equal distance between the two poles, and the tropic of Cancer and the tropic of Capricorn, which are  $23.5^{\circ}$  north and  $23.5^{\circ}$  south respectively. These were easy to establish by noting the position of the sun at midday. Longitude was more difficult to measure, yet extremely important because ships needed to know exactly where they were. Even small mistakes could lead to shipwrecks.

1. Find and copy one word from the first sentence that means 'split'.



2. According to the text, which lines of latitude are the most well-known?



3. Which tropic is  $23.5^{\circ}$  south?



Any violent shaking of the earth's surface is alarming as we have come to expect the ground to be solid and stable. There can be natural causes such as landslides or even man-made ones such as explosions. Perhaps the most destructive and terrifying, however, are earthquakes. They can have a number of different possible causes, but the most common is the shifting of the planet's surface along its fault lines. This is because the earth's crust is not made up of one single shell, but a jigsaw of massive areas of land known as 'tectonic plates'. Where these meet, there is some scope for movement, and even the slightest shift can release an enormous amount of energy – enough to shake whole cities to the ground.

1. Which two words does the text use to describe how we have come to expect the ground to be?



2. The text mentions violent shaking of the earth's surface. What might be a man-made cause of this?



3. What can the shifting of the world's tectonic plates release?



As human activity changes over the centuries, so does the size of its settlements. This is as true around the world as it is in the United Kingdom. In England, London has been the largest city since the Norman conquest in 1066. Meanwhile, other places have risen or fallen in the rankings depending on how people's jobs have changed. For example, some 700 years ago, farming and sea trade were really important, so places like Bristol, King's Lynn, Lincoln and Norwich were amongst the largest in the country. Fast-forward a few hundred years and the scene looked very different. Huge new factories and mills drew people in from the fields. That meant that places like Manchester and Birmingham rapidly grew to become amongst the top five cities by population in England.

**1. Which word in the first sentence means the same as towns or villages?**



**2. In what year was the Norman conquest?**



**3. Which two activities does the text say were 'really important' 700 years ago?**



**4. What do you think was invented that made places like Birmingham more accessible to a growing population?**

