

Question number	Section	Target	Core/HT
22	15.6	DA only	Core

Name _____ Class _____

22 Read the following extract from a science magazine and then answer the questions.

Steady as a rock?

From the 17th century onwards, navigators made detailed maps of the coastlines of Africa and South America. Many of them noticed that there was a very good match between the African west coast and the east coast of South America.

Alfred Wegener was a German geologist. He did not think that the coastline match was a coincidence. In 1912 he published his idea that at one time, millions of years ago, all the continents had fitted together into one supercontinent, which he called Pangaea (= All-earth). Since then, Wegener suggested, Pangaea has broken up into continents, which have slowly moved apart to form the present pattern of land and sea.

At first many scientists did not accept Wegener's ideas. They still believed that features on the Earth's surface were caused by the shrinking of the crust as the Earth cooled down.

However, discoveries such as the mid-Atlantic ridge have now convinced most scientists that Wegener's ideas were correct.

- a) Apart from the coastline fit, give two other pieces of evidence that Alfred Wegener used to support his ideas.

1 _____

2 _____ *2 marks*

- b) Scientists now think that the Earth's *lithosphere* is made of large blocks which are moving relative to each other.

- (i) What is the *lithosphere*?

_____ *1 mark*

- (ii) The large blocks carry the continents. What are these large blocks called?

1 mark

- (iii) Tick (✓) the approximate speed at which these large blocks travel.

- a few centimeters per day
- a few centimeters per month
- a few centimeters per year
- a few centimeters per century

1 mark