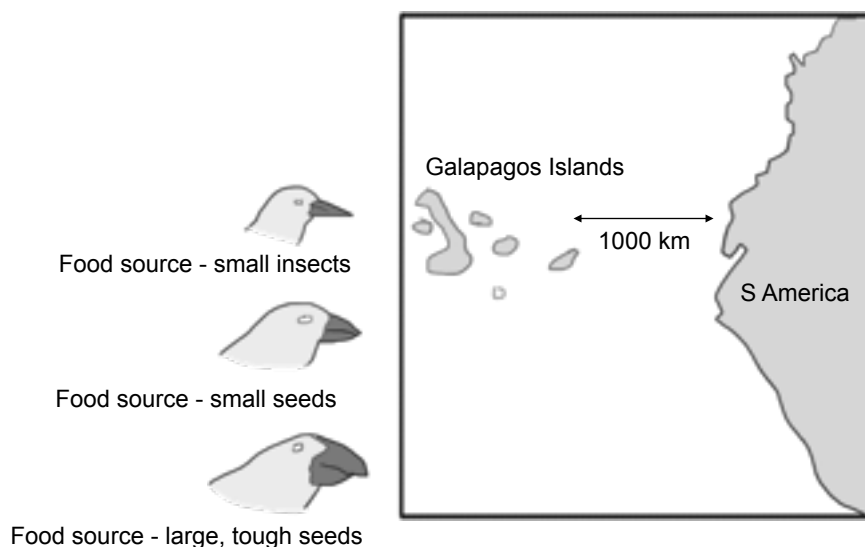


- 1 The diagram below shows some of the species of finches found on the Galapagos Islands. The map shows the relationship of the Galapagos Islands to the west coast of South America.



- 1 (a) (i) A biologist called Charles Darwin proposed that the different beak shapes evolved through natural selection in order to take advantage of the food sources available on the different islands.

Explain how evolution of the finches' beaks occurred via natural selection. **[4 marks]**

Individuals within species show variation in beak shape [1]

because of differences in their genes. [1]

Finches with beak shape most suited to food type are more likely to survive [1]

or mutation for beak shape occurs. [1]

Gene(s) or DNA for beak shape is passed on to offspring. [1]

Be specific about the example in the question. Just giving a general answer, e.g. 'individuals show variation' might lose you the marks. In this case the example is beak shape.

- 1 (a) (ii) Darwin's theory was only gradually accepted.

Give **two** reasons why.

**[2 marks]**

Any two from:

The theory undermined the idea that God made all the animals and plants that live on earth [1]

There was insufficient (not enough) evidence at the time. [1]

The mechanism of inheritance / variation was not yet known. [1]

**(Total 6 marks)**

**End**