

# Homework Booklet Year 10 Evolution

NGO & SONS SCIENCE

## **Evolution 1**

Name: \_\_\_\_\_

Teacher:



#### Evolution Homework 1

#### Section A (3 marks)

For the following questions choose ONE answer:

- 1. Genetic diversity is when there is a range of genetic characteristics within a single species. Genetic variation can occur due to all of the following except:
  - a) Offspring having a random mix of genes
  - b) Genetic material from two parents combining
  - c) Having different species within an ecosystem
  - d) Mutations within a genetic code
- 2. The theory of evolution was developed through contributions of many scientists. Which of the following scientist did **NOT** contribute to the theory of evolution?
  - a) John Dalton
  - b) Alfred Wallace
  - c) Charles Darwin
  - d) Jean-Baptiste Lamarck
- 3. Which of the following statements are **FALSE?** 
  - a) Darwin noticed that species changed over time and came up with an analogy of the 'tree of life'
  - b) Jean-Baptiste Lamarck's contributed greatly to the theory of evolution by sparking interest in the scientific community
  - c) Darwin and Wallace both competed against to each to propose their theory of evolution by natural selection
  - d) Charles Darwin explored the Galapogas islands via the HMS Beagle



### Section B (7 marks)

	1. What was the Lamarckian Theory of Evolution? Provide an example. (2 marks)
	2. Charles Darwin observed the finches on the Galapogas islands. In total there were 13 finches.
г	a) Draw and label examples of 3 different finches he would have observed. (2 marks)
	b) Explain how this observation contributed to Darwin's theory of evolution by natural
	selection. In your answer, include the theory of evolution proposed by Darwin. (3 marks)



#### Section C (6 marks)

Fill in the blanks for the following sentences.

1. As well as Darwin's finches, he observed \_\_\_\_\_\_\_ on two types of islands; \_\_\_\_\_\_ islands and islands with dense \_\_\_\_\_\_.

2. Tortoises had either \_\_\_\_\_\_ shells for head mobility, or low bordered shells which was more \_\_\_\_\_\_ – so the tortoise could push through habitat..

3. Instead of exploring the \_\_\_\_\_\_ islands, Wallace went to Asia, including \_\_\_\_\_\_ and \_\_\_\_\_.

4. Wallace discovered the \_\_\_\_\_\_ line – an imaginary line dividing the \_\_\_\_\_\_ of Asia and Australia.

5. Ultimately both Darwin and Wallace proposed the theory of \_\_\_\_\_\_ by \_\_\_\_\_.