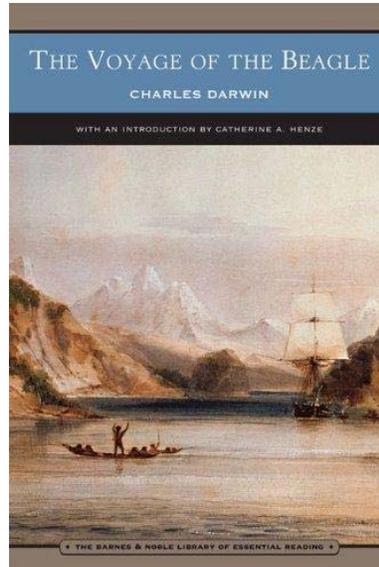


Honors Biology Summer Reading Assignment

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Welcome to Bishop Stang High School. I am looking forward to an exciting year that will introduce you to new ideas, scientific challenges as well as new and innovative ways to help you spark your desire to learn.

Charles Darwin was 22 years old when he stepped aboard the HMS Beagle on December 27, 1831 for a five year voyage. His role as a naturalist on board the ship afforded him the opportunity to explore the world around him. The years of travel and research focused Darwin's mind and sharpened his powers of observation. His trip on the Beagle gave him invaluable training, and the experience prepared him for the scientific inquiry that led to the publication of *On the Origin of Species* in 1859.

After returning from his voyage to England, Darwin wrote a multi-chapter book on his findings and journey. This summer, you will read excerpts from his book. Listen to Darwin's words as he describes his journey of a lifetime!

This assignment is to be completed as you read the selections from The Barnes and Noble Library of Essential Reading Edition; ISBN# 978-0-7607-5496-2; *The Voyage of the Beagle* by Charles Darwin. Call Barnes & Noble in Dartmouth at 508-997-0701 to reserve and pick up in store.

DIRECTIONS: As you read the required selections from *The Voyage of the Beagle*, complete the guided reading questions as directed. Your responses should be well thought out, typed and in complete sentences. Print your answers and attach them to the world map referred to below. This will be due the first day of class.

Pre-Reading Question:

- A. What do you already know about Charles Darwin and his trip aboard the HMS Beagle?
- B. What is Darwin's Theory of Natural Selection?
- C. Use the following link to explore more of the world of Charles Darwin:
[PBS: Evolution](#)

Guided Reading Questions:

Read the selections that are identified in each question and answer in complete sentences.

1. In the introduction on page xv, Darwin dedicates the second edition to Charles Lyell. Who was Charles Lyell and how did he help Darwin in the development of his theory of Natural Selection?
2. As you read through the preface which was written in June of 1845, Darwin mentions his gratitude to a number of individuals including the Reverend Professor Henslow. Research what role Henslow played in Darwin's voyage that earned his praise.
3. In the introductory paragraph of Chapter 1 on page 1, Darwin introduces us to the HMS Beagle. What kind of ship was the Beagle? From where and when did it set sail? What was the purpose of the voyage?
4. The first stop of the HMS Beagle was the island of St. Jago in the Cape Verde Islands. How does Darwin describe the neighborhood of Porto Praya where the ship docked?
5. In chapter 1, beginning on page 5, Darwin begins his description of some of the marine animals that he came across in St. Jago. Choose one of the marine animals and in your own words, describe what Darwin observed.
6. As the Beagle continues its journey, it passes the island of St. Paul. On page 7, he writes that the rocks of this island appear brilliantly white in color. What does he attribute to the rocks appearing white?
7. What two birds did Darwin find on the island of St. Paul? How did he describe them? (See page 7)
8. One of Darwin's most epic journey on the Beagle was to the rainforests of San Salvador, Brazil. Beginning on page 10 he describes the beauty of the Brazilian rainforest. What are some of Darwin's observations that you find inspiring?
9. At the conclusion of chapter 1, Darwin describes seeing narrow lines of water of a bright red color. How does he explain this observation?
10. Chapter 2 opens with the Beagles arrival in Rio de Janeiro. The ship docks from April 4th to July 5th 1832. Darwin becomes acquainted with an Englishman who was going to visit his estate more than a hundred miles from the capital. He accepts the gentleman's offer to accompany him on his trip. What are some of the sights that Darwin writes about from this journey?

11. Chapter 3 opens on page 33 with the HMS Beagle setting sail from Rio de Janeiro's harbor. He comes across a shoal of porpoises as well as other marine animals. As you read the first paragraph, describe Darwin's observations.
12. Darwin stayed 10 weeks in Maldonado and mentions on page 34 his procurement of many animals, birds and reptiles. As you read through Chapter 3, what were some of these species and how does he describe them?
13. In chapter 4 the Beagle sets sail once again from Maldonado to Rio Negro. Darwin encounters General Rosas on one of his excursions. How does Darwin describe Rosas?
14. Chapter 5, Bahia Blanca. This is where Charles Darwin comes across the remains of quadrupeds embedded in stratified gravel and reddish mud. What were some of his findings here? Be specific in your response.
15. As Chapter 6 begins on page 88, Darwin mentions hiring a gaucho to accompany him by horseback to Buenos Ayres. On page 95 Darwin writes about a bird known as the plover which has been wrongfully accused of inelegance. What does he mean by this?
16. At the conclusion of Chapter 6, pages 100 -101, Darwin writes of his first impressions of the city of Buenos Ayres. What are his initial thoughts?
17. On page 113, Darwin describes a very extraordinary bird called the Scissor-beak. What was his conclusion as to the effectiveness of the shape of the Scissor-beak bird?
18. In chapter 8, on page 131, Darwin describes the characteristics of the Gauchos that he has come across in his travels. What are some of those traits and how have they helped him in his excursions?
19. On page 168 – 169, Darwin refers to three birds which use their wings for other purposes besides flight. What are those birds and how are their wings used?
20. Chapter 10, December 28 1862, the Beagle arrives in Tierra Del Fuego. How does he describe the inhabitants of this land?
21. In Chapter 11 on page 201, Darwin mentions the importance and abundance of kelp within the Straits of Magellan. What connection did Darwin make to the kelp and the survival of the living organisms in that region?
22. On page 227 in Chapter 12, Darwin concludes this chapter with some observations of the animals and birds of Chile. What did he write about the puma and its eating habits?
23. January 1, 1835 began on a stormy note. As you read this account on pages 240 and 241, how does Darwin describe the seals and turkey buzzards along with other birds in the area of the isle of Chonos?

24. On page 256, Darwin writes about experiencing an earthquake. How did he describe the quake and how could this have influenced him in the development of his theory?
25. In Chapter 15 beginning on the bottom of page 283, Darwin begins to describe how the Atlantic Ocean once came to the foot of the Andes Mountains. What did he say contributed to the changing landscape and how did this help him develop his theory?
26. In Chapter 16 pages 294-295, Darwin describes the appearance of shells that are visible in various layers of the surrounding rock formations. What did he say accounted for this?
27. Read all of Chapter 17 as this is Darwin's account of his trip to the Galapagos Archipelago. How many islands comprise the Galapagos? What kind of islands are they? What is the climate of these islands?
28. On page 321, Darwin first meets the giant tortoise on Chatham Island. How does he describe these tortoises?
29. Beginning on page 325 is where Darwin comes across perhaps one of his most beloved species on the Galapagos, the finches. How does he describe the finches?
30. On page 331, Darwin encounters a remarkable genus of lizards that were aquatic. What are some of his observations of these lizards?
31. Chapter 18 begins with the Beagle making a long and arduous 3200 mile trip from the Galapagos towards Tahiti and New Zealand. From October 20th to November 15th the Beagle sailed until it arrived on the island of Tahiti in the South Sea. How did Darwin recall the inhabitants on this island on page 348?
32. On page 369, Darwin reminisces about how he has spent the past four Christmases away from his home in England. Where did the past four years find him? What was his wish for the Christmas yet to come?
33. Chapter 19 begins with the arrival of the HMS Beagle to Australia. On page 378, Darwin makes note of the rock strata being acted upon by the action of water. How could this have helped him in the formation of his theory of Natural Selection?
34. In chapter 20 on page 401, Darwin gives a brief account of the three types of coral reefs that make up the Keeling or Coco Islands. What are the three reef types and how did Darwin describe them?
35. In the last chapter of the book beginning on page 432, Darwin gives us a short retrospect of the advantages and disadvantages as well as the pains and pleasures of circumnavigating the world. Make a list of the advantages, disadvantages, pains and pleasures as described by Darwin.