

World History and Culture
Kailua High School
Social Studies Requirement
2023-2024

J.R. McNeill. "Of Rats and Men: A Synoptic Environmental History of the Island Pacific." Journal of World History: Vol. 5. no. 2 (1994).

McNeill, J.R. 1994. "Of Rats and Men: A Synoptic Environmental History of the Island Pacific." Journal of World History: Vol. 5. no. 2.

Instructions: Write a class heading, skip a line, and then write two citations for the reading. Respond in writing to each instruction below. Include subheadings that are within the instructions (i.e., see the subheading between numbers 6 and 7 below). Do not include these instructions with your answers.

1. Write out and then fill in the blanks: The island world of the Pacific shows the _____ power of _____ species, including *Homo sapiens*, and of their efforts to secure _____ for themselves. (Page 299: Paragraph 2 - Page 300: Paragraph 1. Hereinafter written as 299:1-300:1.

2. Identify the characteristic that has "...caused Pacific ecosystems to become labile, that is, prone to sudden change." (300:1)

*labile: adjective: liable to change; easily altered

3. Write out the "governing" factors of "[t]he pace of Pacific environmental history." (300:2)

4. Identify the "chief (but not sole) determinant of these spurts and lulls" that has affected the pace of Pacific transport and communication. (300:2)

5. Scan through the reading and then list the "ages" that define the "story" of "Pacific environmental history." Be certain to title the list of ages.

6. Identify the "direction of Pacific environmental history." (300:2)

*homogenization: noun: the process of making things uniform or similar

THE PREHUMAN PACIFIC (300-302)

7. How does the author describe "[t]he great majority of the Pacific islands?" (300:4 - 301:1)

*basalt: noun: a dark, fine-grained volcanic rock that sometimes displays a columnar structure. It is typically composed largely of plagioclase with pyroxene and olivine.

8. Why is New Zealand different than "the great majority of the Pacific islands"?" (Ibid)

"New Zealand [is different than 'the great majority of the Pacific islands' because it] already had life forms when it spun off from Gondwanaland some 80 million years ago and has remained until recently a sanctuary for species of the Cretaceous (Stevens, McGlone, and McCulloch 1988; Anderson and McGlone 1992)" (301:1)

9. How did "[l]ife arrive[] on most other islands"? Include how Hawaii was populated by early plants. (ibid)

*flora: noun: the plants of a particular region, habitat, or geological period

*fauna: noun: the animals of a particular region, habitat, or geological period

10. Write out the "rate" at which "Hawaii acquired new species" of plants. (ibid)

11. Identify the "only" mammals that "successfully colonized [islands] east of New Guinea." (ibid)

12. Explain the meaning of the following phrase: "This attenuation is strong for land species, less strong for marine species, and nonexistent for oceanic birds, although fairly strong for land birds." (ibid. Hint: state "the rule of thumb.")

*attenuation: noun: attenuate: verb: reduce the force, effect, or value of; reduce the amplitude of; reduce in thickness.

*biota: noun: the animal and plant life of a particular region, habitat, or geological period

13. Explain why "[t]hroughout most of the Pacific...plants developed no defenses, such as spines, poisonous alkaloids, or bitterness." (302:1)

*alkaloid: noun: any of a class of nitrogenous organic compounds of plant origin which have pronounced physiological actions on humans. They include many drugs (morphine, quinine) and poisons (atropine, strychnine).

*paucity: noun: the presence of something only in small or insufficient quantities or amounts

14. Fill in the paraphrased sentence: "The more remote an island is, the more _____ species the island will have." (ibid)

*endemic: adjective: (of a plant or animal) native and restricted to a certain place

15. Fill in the paraphrased sentence: "The more endemic species an island has, the more _____ the species are if they have to compete with continental plants for survival." (ibid)

*vulnerable: adjective: susceptible to physical attack or harm

16. Identify the "second source of vulnerability" of endemic plants and animals of the Pacific islands. (302:2)

17. Because animals in the Pacific had no predators, "Darwin found many birds almost _____... and Pacific plants had little experience of _____, because _____ fires were very rare..." (ibid)

18. Complete the following sentence: "In shore, Pacific ecosystems were very different from continental ones on account of their _____ ." (ibid)

19. Explain the following statement: "The opportunity for speciation and the absence of humankind meant that Pacific island ecosystems tended to diverge over time." (302:3)

*diverge: verb: develop in a different direction; differ markedly

20. Define "[e]cological homogenization" and its cause in the Pacific. (ibid)

THE AGE OF THE OUTRIGGER (303-312)

21. Identify the "challenge" of "the first human colonists" due to the biogeographical peculiarities of the island Pacific..." (303:1)

*biogeographical: adjective: related to the branch of biology that deals with the

geographical distribution of plants and animals

22. Duplicate and then fill in the following table. (ibid)

Time Period of Pacific Colonization	
Location	Humankind Arrival
New Guinea	
Melanesia	
Micronesia Polynesia	
New Zealand	

23. Spatially, why is Polynesian “ethnos” significant? (ibid)

*ethnos: noun: an ethnic group

*ethnic: adjective: of or relating to large groups of people classed according to common racial, national, tribal, religious, linguistic, or cultural origin or background

24. Identify “two broad phases” that “changed [Polynesian] islands”. (303:2)
See page 312: “Age of Cook,” paragraph 2.

*straitened: adjective: restricted in range or scope

25. What is the cause of “straitened ecological circumstances”? (ibid)

26. Identify two reasons that “[i]sland settlers, whether Polynesian, Melanesian, or Micronesian, found no tropical paradise.” (303:3)

27. Describe “the most dramatic change...in the southwest Pacific...in the last 100,000 years.” (ibid)

28. Identify two differences between “low islands” and “higher islands”. (303:4)

29. Make a list of “environmental disasters...” that could affect “...all islands...” (303:4 - 304:1)

30. Identify four “difficulties” concerning “[a]griculture”. (ibid)

31. In spite of “ingenious devices to cope with...new environments, such as taro

pits ,...ensilage, ...irrigation systems, ...and “exploit[ation] [of] marine resources ... [such as] mollusks, seals, dolphins, and whales”, what was “routine, ...frequent, ... and short”? (304:2)

*ensilage: noun: another word for silage: noun: grass or other green fodder compacted and stored in airtight conditions, typically in a silo, without first being dried, and used as animal feed in the winter.

32. To make the best of the “robust challenges” during colonization of Pacific islands, what did Polynesians “create[] by importing...’portmanteau biota’? (304:3)

*portmanteau biota: noun: portmanteau: noun: a large trunk or suitcase, typically made of stiff leather and opening into two equal parts; biota: noun: the animal and plant life off a particular region, habitat, or geological period. Lacking a true portmanteau, how did Polynesians transport their plants and animals?

33. Make a list of the “cosmopolitan species” of the “Polynesian portmanteau biota” which “promoted ecological homogenization...” (304:3)

34. Identify the “great labor-saving device...brought [by] Polynesians...[t]o assist in the creation of ... transported landscapes.” (305:1)

35. In addition to using fire to clear endemic flora for farming, what did the Polynesians bring that “...sealed the fate of the indigenous island birds? (305:2)

36. Explain what eventually happens to “...abundant suppl[ies] of fish and game...after invasion by humankind.” (306:2)

37. As natural sources of flora and fauna are depleted by humans, identify two options that emerge to deal with the creation of “...a slow crisis.” (ibid)

38. Identify the tool of the Pacific “...settlers’ [that had a significant] impact on vegetation” throughout the Pacific islands. [306:3]

39. In addition to “[c]rops [that] replaced the forest trees,” what other plant “...throve on disturbed ground or were compatible with fire”? (307:2)
“Crops replaced the forest trees, but so did weeds that throve on disturbed ground or were compatible with fire.” (307:2]

40. What was the result of "...settle[ment] [of] the early Hawaiians"? (ibid)

*swidden: noun [used as an adjective]: an area of land cleared for cultivation by slashing and burning vegetation

41. Read paragraph 3, page 307, through paragraph 1, page 308. Identify two major impacts of burning. (307:3-308:1)

*sheetwash/sheet wash erosion: noun[used as an adjective]: the even erosion of substrate along a wide area

*substrate: noun: an underlying substance or layer

*lateritic soils: lateritic: adjective: a reddish clayey material, hard when dry, forming a topsoil in some tropical or subtropical regions and sometimes used for building

42. In what ways did "Pacific islanders moderate[] their impact on...reefs, lagoons, and the sea"? (308:2)

43. Read from paragraph 4, page 308, through paragraph 1, page 309. Write out the "...Darwinian terms one might..." use to describe "...Pacific island environments...and societies." (308:309:1)

44. Identify the "...Islanders who appear to have brought themselves to the brink of ruin through ecological degradation of their island home." (309:1)

45. Identify the "...systems and political structures" within which "...ecological restraints developed in Pacific island societies..." (309:2)

47. Did Pacific "...islanders live[] in harmony with their environments"? (309:3)

48. In what ways did "Pacific islanders...[affect] their environments..."? (ibid)

49. Were Pacific islanders "...ecological angels..." (ibid)

50. What "...was the only powerful driving force behind environmental degradation before European impact"? (310:3)

51. Write out the "Pacific islanders[']...tool kit..." (ibid)

52. How does the author describe “Population history” before European contact among the Pacific islands?” (311:1)

*carrying capacity: noun: the number of people, other living organisms, or crops that a region can support without environmental degradation.

53. After “Cook entered the Pacific in 1769...” how was environmental change...” affected? (312:1)

THE AGE OF COOK, PART I: SAILING SHIPS AND EXTRACTION,
1769-1880 (312-326)

54. Why does the author compare the “1760s” to the “1490s”? (312:3)

55. The author divides the “...age of Cook...into two parts”: 1769-1880; and “1880 to the present.” How do “[t]he two parts parallel the two phases visible in the environmental history of the pre-European Pacific”? (312:4-313:1) See question 24, above. (303:2)

56. Identify two differences between the environmental histories of “the age of the outrigger and the Age of Cook.” (313:1)

57. Although many Europeans had sailed across the Pacific before the Age of Cook, why did “Oceania” remain in “ecological isolation” until the time of Cook? (313:2)