

Study Guide for Exam 2

Endless Voyage 107: It's In the Water, Endless Voyage 108: Beneath the Surface

(Chapter 6 Water and Ocean Structure, Chapter 7 Seawater Chemistry)

- 1) The bonding of the water molecule
- 2) Water and the Latent Heat of Fusion
- 3) Water and the Latent Heat of Vaporization
- 4) Density Zones of the ocean and pycnoclines
- 5) Water as a universal solvent
- 6) Water's Colligative Properties
- 7) Dissolved Gases in the Ocean

Endless Voyage 109: Going to Extremes

(Includes stuff from Chapters 8, 9, 13)

Endless Voyage 110: Something in the Air

(Chapter 8 Circulation of the Atmosphere)

- 1) Composition of the atmosphere
- 2) Coriolis Effect
- 3) Global Wind Circulation
- 4) Global Pressure Systems
- 5) Air Masses
- 6) Storm Fronts

Endless Voyage 111: Going With The Flow, Endless Voyage 112: Deep Connections

(Chapter 9 Circulation of the Ocean)

- 1) Ekman Transport
- 2) Geostrophic Gyres
 - a) Western Boundary Currents
 - b) Eastern Boundary Currents
 - c) Transverse Currents
- 3) Monsoonal and High Latitude Currents
- 4) Upwelling and Downwelling
- 5) ENSO
- 6) Common Water Masses

Endless Voyage 113: Surf's Up, Endless Voyage 114: Look Out Below

(Chapter 10 Waves)

- 1) Parts of the Wave
- 2) Classifying Waves
- 3) Types of Waves
- 4) Factors that affect wind wave development
- 5) Plunging and Spilling Waves
- 6) Seiches, Storm Surges, Tsunamis and Seismic Sea Wave

Endless Voyage 115: Ebb and Flow

(Chapter 11 Tides)

- 1) Newton's Equilibrium Theory
- 2) LaPlace Equations and Dynamic Theory
- 3) Sun and Moon's Influence on the Tides
- 4) Types of Tides
- 5) Amphidromic Circulation

Endless Voyage 116: On the Coast, Endless Voyage 117: Due West

(Chapter 12 Coasts)

- 1) Erosional Coasts
- 2) Depositional Coasts
- 3) Coasts Formed by Biological Activity
- 4) Estuaries
- 5) Characteristics of US Coasts

You will get one hundred (100) objective type questions on the exam and three additional essays from the topics listed on this study guide. Be sure to review both the movies and the textbook.