

Lecture #19 – Moving Onto Land

I. Tetrapoda

A. “Sarcopterygii”

1. Coelacanth
2. Lungfishes

B. Transition from water to land.

1. Respiration
 - a. Gills
 - b. Swim Bladder
 - c. Lungs
 - d. Through Skin
2. Support and Movement
 - a. Without buoyancy, gravity is hard
 - b. Improved limb support
3. Water Retention
 - a. Permeable skin susceptible to drying
 - b. Urea and uric acid
4. Reproduction
 - a. Still in water
 - 1) Numerous adaptations to protect eggs from aquatic predators
5. Sense Organs
 - a. Detecting sound in air – stapes and eardrum
 - b. Eyelids to protect eyes

Reading: Chapter 16 - pages 329-330

Questions: Page 339 –11, 12, and 13.

Reading: Chapter 17 - pages 341-355.

Questions: Page 355 – 1, 2, 3, 4, 5, 6, 7, 8, and 9.

