

AP Biology 021 – Homeostatic Evolution

Video Review Sheet

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1. Introduction:

- a. Describe the Tiktaalik fossil and its importance.

- b. Name and describe the two items do homeostatic mechanisms show:

2. Continuity:

- a. What does our excretory system do? (2x)

- b. Flatworms: have to get rid of: _____ and _____.
They use protonephridia – which has a _____ cell that creates a current in a tube.
- c. Earthworms use metanephridia – have added in the _____ system, which wraps around a tube to get rid of wastes.
- d. Vertebrates: we use a nephron (millions) in our kidneys – again a _____ and the circulatory system wrapped around it in order to get rid of wastes and generate a current.

3. Change:

- a. What does the respiratory system do?

- b. Requirements for attaining oxygen: (3x)

- c. What is used in water? _____, its wet, but a low amount of _____
- d. What is used on land? _____,
- e. Progression of lung development:
 - i. As the operculum of the fish move it draws water over the _____. It has to be efficient so it can pick up oxygen

 - ii. Vertebrates don't need to worry about the amounts of oxygen but we do have to worry about _____
- f. Lung fish has both gills and _____, shows transition.
- g. Amphibians (frog) use positive pressure, like the _____ of the fish which shows evolutionary _____.