

Essay questions for Lecture 1

1. Describe and explain the concept that ontogeny recapitulates phylogeny.
2. Describe major accomplishments in physiology in the 1900s.
3. Describe what Claude Bernard and Walter Cannon contributed to physiology
4. Define homeostasis. Give an example of a positive and negative feedback loop.
5. Calculate the following. A dog weighs 22 pounds. A certain medicine is to be given at 12.3 mg/kg. The solution is in a concentration of 100 mg/mL. How many mL of this drug should be given to the dog? Show your work.
6. Describe the relationships between size, volume and mass of any object.
7. Which would yield you more fur/hide/surface area? 40 1-kg rats, or 10, 4 kg mink? Which would produce more heat per unit of time?