

EXAM EXPECTATIONS

AP Biology

“Unit 2 B Level”

OUTLINE how rabbits use their ears to thermoregulate

OUTLINE the components of the negative feedback response and their role in the feedback loop

OUTLINE the role of the hypothalamus in thermoregulation

OUTLINE how cells can use various substances as energy sources

OUTLINE the four classes of essential nutrients

OUTLINE nonessential nutrients

OUTLINE heterotrophs and autotrophs

OUTLINE herbivores, carnivores and omnivores

OUTLINE hyperosmotic, hypoosmotic and isoosmotic solutions

OUTLINE the osmolarity of marine invertebrates relative to their surroundings

OUTLINE the function of the kidneys and the liver

OUTLINE the stages of osmoregulation in the kidney

OUTLINE where urine becomes concentrated in a nephron

OUTLINE why marine organisms may die in freshwater and vice versa

OUTLINE where the light reactions take place and the location of the reactions of the Calvin cycle

DESCRIBE why ice floats

DESCRIBE the relationship between the light reactions and the Calvin cycle

DESCRIBE the structure of the lining of the intestine and the functional significance

DESCRIBE ways in which terrestrial mammals thermoregulate

DESCRIBE temperature acclimatization

DESCRIBE how the counter current exchange of blood in a goose helps in thermoregulation

DESCRIBE the digestive processes that might be affected by surface area

DESCRIBE why juxtamedullary nephrons are found in some vertebrates but not others

DESCRIBE the type of urine that humans can produce and the relationship to water availability

COMPARE reducing and oxidizing agents

COMPARE the activity of an ectotherm with different seasons

COMPARE the digestion and absorption of carbohydrates and fats

COMPARE selectivity of each process carried by the kidney during osmoregulation

ANNOTATE a drawing of a nephron