1. b Berger’s disease, IgA nephropathy; bypasses C2/C4 which are early in pathway

2. c Goodpasture’s syndrome; autoantibodies against the noncollagenous portion of type IV collagen; lungs and kidneys; male; anemia; treatment- plasmapharesis or plasma exchange to remove autoantibodies from serum

Alports- recurrent hematuria, progressive hearing impairment, ocular- cataracts/dislocated lens

Henoch Schonlein purpura- focal segmental glomerulonephritis

Wegener’s- acute necrotizing granulomas of the respiratory tract and focal necrotizing vasculitis

3. a post strep glomerulonephritis; nephritic process, hypertension from salt retention, hypervolemia leading to swelling, hypocomplementemia resolves after 6 to 8 weeks; progression to chronic renal failure is kids is rare

4. e The rise in H+ and fall in HCO3- that occurs in type I distal renal tubular acidosis does not increase the anion gap because the decrease in HCO3- is accompanied by an increase in Cl. The failure of the pump causes decreased H+ and net acid excretion, which causes less ammonium to be excreted in urine. The low HCO3- in the filtrate reduces Na+ reabsorption by the Na-H exchanger and therefore more Na+ is delivered to distal nephron. The increased Na+ delivery results in salt wasting and a secondary hyperaldosteronism which in turn causes K+ concentration to fall.

5. d chronic obstructive uropathy results in polyuria and nocturia due to impaired concentrating ability. A distal renal tubular acidosis would result with accompanying hyperkalemia. Type IV RTA. With an elevated creatinine some degree of hydronephrosis on renal ultrasound

6. d drinking water after losing a significant volume of sweat decreases the osmolarity of the extracellular fluid, which causes water to move from extracellular to intracellular causing volume to increase. Symptoms from brain swelling.

7. d vasculitis; subacute, erythrocyte casts, positive ANCA

8. e stomach acid contains K and Cl; vascular volume loss; kidneys conserve bicarb and sodium at expense of K and Cl

9. c FSGS

10. d cirrhosis or SIADH; both- low serum osmolarity, high urine osmolarity because of inappropriate vasopressin secretion leading to water retention; cirrhosis- venodilation leading to decreased circulating volume which causes renal sodium retention; SIADH- euvolemic and no increase in sodium avidity is present