 **Segue**

Using only arrows and short phrases or a flow diagram, explain how to get from A to B

*Example:*

*↑dead space paCO2 unchanged*

*↑ dead space → ↓minute alveolar ventilation → ↑pCO2 → sensed by central and periph chemoreceptors → ↑minute ventilation → return paCO2 to baseline*

1. ↑RAP ↑UO

2. Aspirin overdose ↓paCO2

3. High plasma [glucose] diuresis

4. Hypoventilation tachycardia

1. ↑RAP → ↑stretch in RA → ↑release ANF

relax glomerular v/d aff and ↓ADH ↓aldosterone Inhibit Ang II

mesangial cells v/c eff arterioles

↑GFR ↓reabsorption water

in collecting ducts

↑UO

2. Aspirin overdose

↓

incr AG metab acidosis direct stimulation of resp centre

↓

sensed by periph and central chemorecs

↓

↑minute ventilation resp alkalosis

↓paCO2

3. High plasma [glucose] → freely filtered in glomerulus → incomplete reabsorption in PCT (by secondary active transport and facilitates diffusion) if exceeds transport maximum → ↑ luminal osmotic load

↓

prevent water and solute reabsorption in LoH

↓

dissipate medullary concentration gradient

↓

unable to concentrate urine

↓

osmotic diuresis

4. Hypoventilation → ↑pCO2 → sensed by central chemorecs → ↑ sympathetic output → tachycardia