ROSEDALE ACADEMY

Kidney & Nephrons Handout

As you work your way through the kidney and nephrons interactive activity, answer the following questions to help you collect the relevant information.

1. **What are the components of a kidney and what are their functions?**

2. **For each of the following substances, and describe their movements through the nephron and blood (e.g. glucose enters the nephron from the renal artery and is then reabsorbed into the blood at the proximal convoluted tubule):**

3. **List the components of the bowman's capsule. What substances are able to pass through the bowman's capsule and enter into the nephron?**

4. **Which substances are able to be reabsorbed back into the bloodstream at the proximal tubule? What types of transport proteins are at work here?**

5. **What happens at the descending and ascending limb of the loop of Henle? Make sure to describe the movement of substances either into or out of the nephron.**

6. **What are the effects of ADH at the collecting duct of the nephron? Describe the steps in which ADH works at the collecting duct.**

7. **Under what circumstances might your body want to secrete ADH? Explain your reasoning.**