

Cat Dissection

Title: The Urinary System Lab

Purpose: To dissect and observe the structures of the cat urinary system

Materials: shirt, gloves, paper towels, scalpel, forceps, scissors, probes, cat, colored pencils, rubber bands, drawing paper, lab manuals, handouts

Dissection of the Cat Urinary System

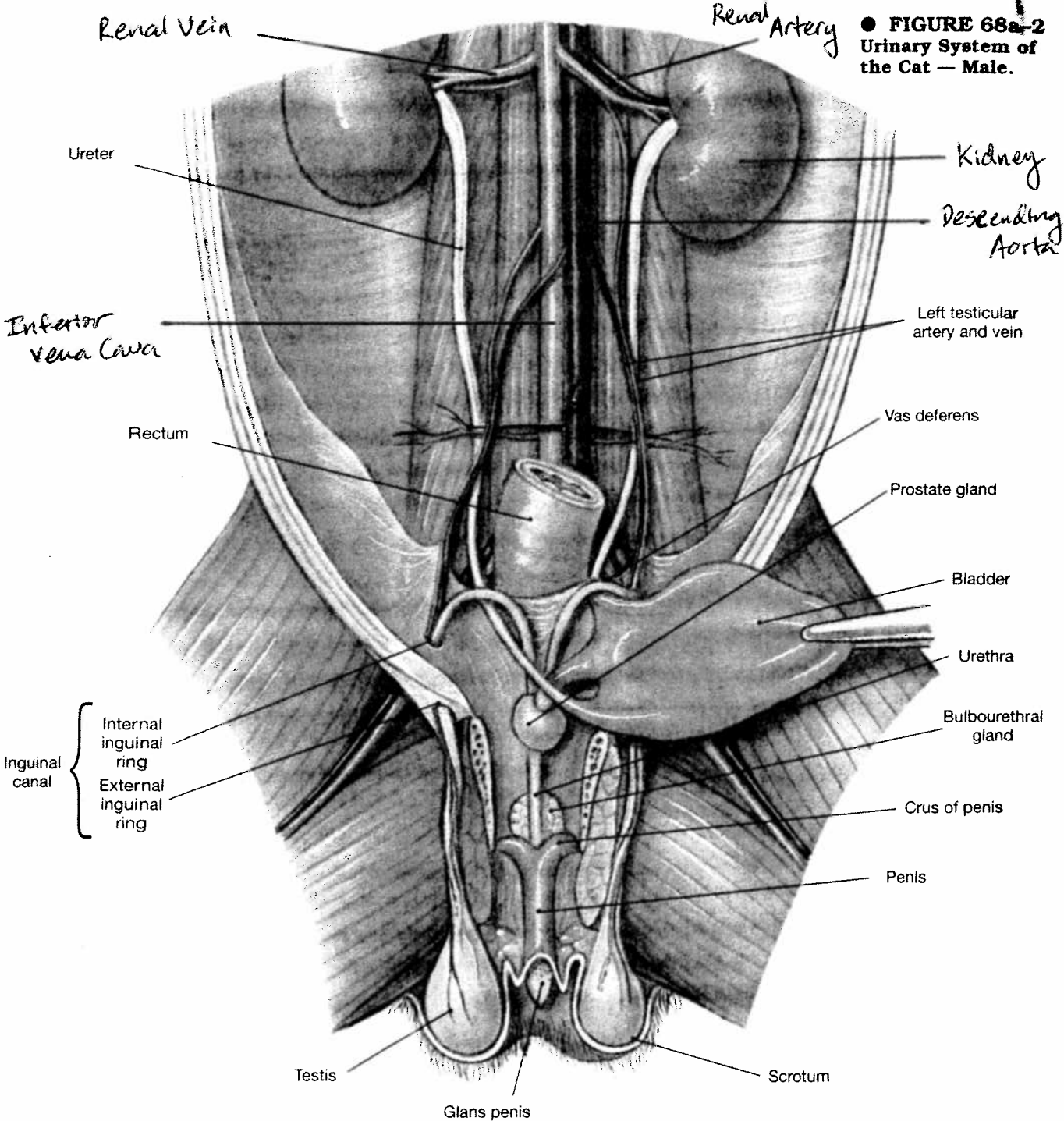
Procedure:

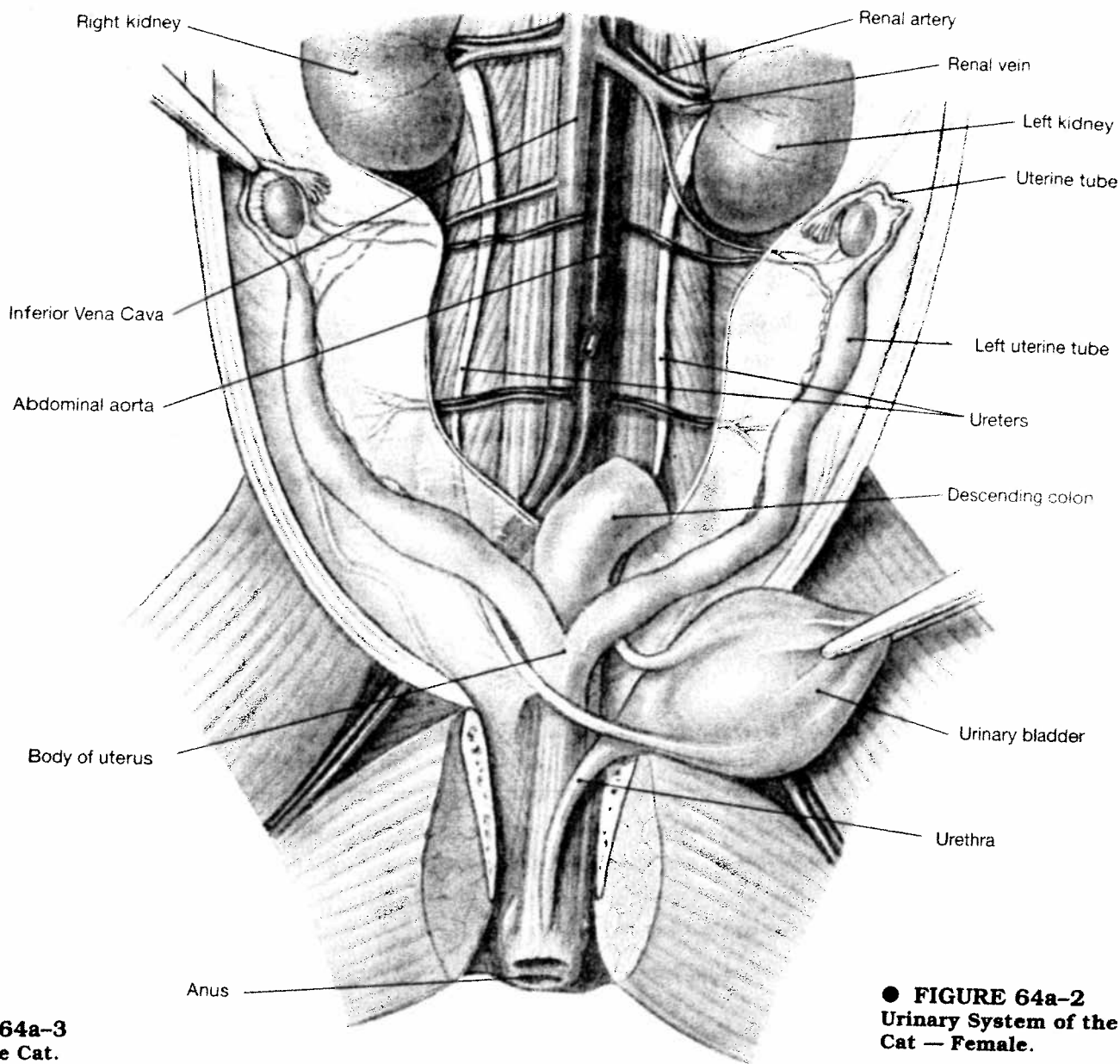
1. Use the illustration manual to aid in identifying the structures of the cat urinary system
2. Push the intestines to one side until you locate the kidneys.
3. Carefully remove the thin, filmy, transparent connective tissue called the **peritoneum**. Also, carefully remove adipose tissue around the kidney to gain a clearer view of the kidney.
4. Identify the **medial** and **lateral borders** of the kidney. Next identify the **hilum**, which is the indentation on the medial border where the renal artery, renal vein, and ureter enter and exit.
5. Identify and observe the following external structures:
 - **Kidney***
 - **Adrenal glands (on top of kidney) (do not draw)**
 - **Hilum**
 - **renal artery***
 - **renal vein***
 - **ureter***
 - **urinary bladder***
 - **urethra (do not draw)**
6. Carefully remove one of the kidneys by cutting the renal artery, renal vein, and ureter.
7. Cut the kidney in half by making a cut parallel to the transverse plane so that you have an anterior and a posterior section of kidney.
8. Identify and observe the following internal structures:
 - **Renal cortex***
 - **Renal medulla***
 - **Renal pyramid (do not draw)**
 - **Renal pelvis***
 - **Renal artery**
 - **Renal vein**
 - **Ureter**
9. Draw, in detail, the structures of the urinary system of the cat. Use at least ½ of the page
10. Label and color each of the structures that are * in step 5 and step 8.

Conclusion Questions:

1. Describe the function of each of the structures that are * in steps 5 and 8 (8 organs total).
2. Describe the path of urine through the urinary system.
3. What is the function of the kidney?
4. What is the function of the nephron?

● FIGURE 68a-2
 Urinary System of
 the Cat — Male.





● **FIGURE 64a-3**
Kidney of the Cat.

● **FIGURE 64a-2**
Urinary System of the
Cat — Female.

