# The Urinary System

## Learning Exercises

Class ___________________________  Name ___________________________

### Matching Word Parts 1
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1. bladder</td>
<td></td>
<td>-cele</td>
</tr>
<tr>
<td>9.2. glomerulus</td>
<td></td>
<td>cyst/o</td>
</tr>
<tr>
<td>9.3. hernia, tumor, cyst</td>
<td></td>
<td>glomerul/o</td>
</tr>
<tr>
<td>9.4. kidney</td>
<td></td>
<td>lith/o</td>
</tr>
<tr>
<td>9.5. stone, calculus</td>
<td></td>
<td>nephro/o</td>
</tr>
</tbody>
</table>

### Matching Word Parts 2
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.6. drooping down</td>
<td></td>
</tr>
<tr>
<td>9.7. renal pelvis</td>
<td></td>
</tr>
<tr>
<td>9.8. setting free, separation</td>
<td></td>
</tr>
<tr>
<td>9.9. surgical fixation</td>
<td></td>
</tr>
<tr>
<td>9.10. to crush</td>
<td></td>
</tr>
</tbody>
</table>

### Matching Word Parts 3
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.11. complete, through</td>
<td></td>
<td>-uria</td>
</tr>
<tr>
<td>9.12. enlargement, stretching</td>
<td></td>
<td>urethral/o</td>
</tr>
<tr>
<td>9.13. ureter</td>
<td></td>
<td>ureter/o</td>
</tr>
<tr>
<td>9.14. urethra</td>
<td></td>
<td>-ectasis</td>
</tr>
<tr>
<td>9.15. urination, urine</td>
<td></td>
<td>dia-</td>
</tr>
</tbody>
</table>
Definitions
Select the correct answer and write it on the line provided.

9.16. Urine is carried from the kidneys to the urinary bladder by the _____________.
    glomeruli nephrons urethras ureters

9.17. A stone in the urinary bladder is known as _____________.
    choledolith cystolith nephrolith ureterolith

9.18. The increased output of urine is known as _____________.
    anuria diuresis dysuria oliguria

9.19. Before entering the ureters, urine collects in the _____________.
    glomeruli renal cortex renal pelvis urinary bladder

9.20. Urine leaves the bladder through the _____________.
    prostate trigone ureter urethra

9.21. Urine gets its normal yellow-amber or straw color from the pigment known as _____________.
    albumin bilirubin hemoglobin urochrome

9.22. In the male, the _____________. carries both urine and semen.
    prostate gland renal pelvis ureter urethra

9.23. A specialist who treats the genitourinary system of males is a/an _____________.
    gynecologist nephrologist neurologist urologist

9.24. In _____________, the urethral opening is on one side of the penis.
    epispadias hypespadias hypospadias paraspadias

9.25. The term _____________ describes treatment in which a body part is removed or its function is destroyed. This type of procedure is frequently used to treat prostate cancer.
    ablation adhesion lithotomy meatotomy

Matching Structures
Write the correct answer in the middle column.

<table>
<thead>
<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.26. the opening through which urine leaves the body</td>
<td></td>
<td>urethral meatus</td>
</tr>
<tr>
<td>9.27. the portion of a nephron that is active in filtering urine</td>
<td></td>
<td>urethra</td>
</tr>
<tr>
<td>9.28. the outer layer of the kidney</td>
<td></td>
<td>ureters</td>
</tr>
<tr>
<td>9.29. the tube from the bladder to the outside of the body</td>
<td></td>
<td>renal cortex</td>
</tr>
<tr>
<td>9.30. the tubes that carry urine from the kidney to the bladder</td>
<td></td>
<td>glomerulus</td>
</tr>
</tbody>
</table>

Which Word?
Select the correct answer and write it on the line provided.

9.31. A surgical incision into the renal pelvis is _____________.
    pyelotomy pyeloplasty
9.32. The discharge of blood from the ureter is ____________.
    ureterorrhagia       urethrorrhagia
9.33. The term meaning excessive urination is ________________.
    incontinence         polyuria
9.34. The term meaning inflammation of the bladder is ____________.
    cystitis             pyelitis
9.35. The major waste product of protein metabolism is ________________.
    urea                  urine

**Spelling Counts**
Find the misspelled word in each sentence. Then write that word, spelled correctly, on the line provided.

9.36. A Williams tumor is a malignant tumor of the kidney that occurs in children.

9.37. Being unable to control excretory functions is known as incontinance.

9.38. The process of withdrawing urine from the bladder is known as catherization.

9.39. Kegel exercises are a series of pelvic muscle exercises used to strengthen the muscles of the pelvic floor to control urinary stress incontinence.

9.40. A vesicovaginal fistula is an abnormal opening between the bladder and vagina.

**Abbreviation Identification**
In the space provided, write the words that each abbreviation stands for.

9.41. BPH
9.42. ESRD
9.43. ESWL
9.44. IVP
9.45. OAB

**Term Selection**
Select the correct answer and write it on the line provided.

9.46. The absence of urine formation by the kidneys is known as ________________.
    anuria          nocturia         oliguria         polyuria
9.47. The surgical suturing of the bladder is known as ________________.
    cystorrhaphy    cystorrhagia     cystorrhaxis     nephorrhaphy
9.48. The term meaning the freeing of a kidney from adhesions is ________________.
    nephrolithiasis nephrolysis     nephropyosis     pyelitis
9.49. The term meaning scanty urination is

   diuresis    dysuria    enuresis    oliguria

9.50. The process of artificially filtering waste products from the patient's blood is known as

   diuresis    hemodialysis    homeostasis    hydroureter

**Sentence Completion**
Write the correct term on the line provided.

9.51. An inflammation of the urinary bladder that is localized in the region of the trigone is known as

9.52. The condition of having a stone lodged in a ureter is known as

9.53. The placement of a catheter into the bladder through a small incision made through the abdominal
   wall just above the pubic bone is known as

9.54. The surgical fixation of the bladder to the abdominal wall is a/an

9.55. A/An ___________________________ of the prostate (TURP) is the removal of all or
   part of the prostate through the urethra.

**Word Surgery**
Divide each term into its component word parts. Write these word parts, in sequence, on the lines provided. When necessary use a back slash (/) to indicate a combining vowel. (You may not need all of the lines provided.)

9.56. **Hyperproteinuria** is abnormally high concentrations of protein in the urine.

         ________________________________

9.57. **Hydronephrosis** is the dilation of the renal pelvis of one or both kidneys.

         ________________________________

9.58. **Voiding cystourethrography** is a diagnostic procedure in which a fluoroscope is used to examine the
   flow of urine from the bladder and through the urethra.

         ________________________________

9.59. A **nephrolithotomy** is the surgical removal of a kidney stone through an incision in the kidney.

         ________________________________

9.60. **Lithotripsy** means to crush a stone.

         ________________________________

**True/False**
If the statement is true, write **True** on the line. If the statement is false, write **False** on the line.

9.61. _____ Stress incontinence is the inability to control the voiding of urine under physical stress such
   as running, sneezing, laughing, or coughing.

9.62. _____ Prostatism is a malignancy of the prostate gland.

9.63. _____ Urethrorrhoea is bleeding from the urethra.

9.64. _____ Renal colic is an acute pain in the kidney area that is caused by blockage during the passage
   of a kidney stone.

9.65. _____ Acute renal failure has sudden onset and is characterized by uremia.
Clinical Conditions
Write the correct answer on the line provided.

9.66. Mr. Baldridge suffers from excessive urination during the night. The medical term for this is ________________.

9.67. Rosita LaPinta inherited ________________ kidney disease. These cysts slowly reduce the kidney function, and this eventually leads to kidney failure.

9.68. Doris Volk has a chronic bladder condition involving inflammation within the wall of the bladder. This is known as ________________.

9.69. John Danielson has an enlarged prostate gland. This caused narrowing of the urethra, which is known as ________________.

9.70. Norman Smith was born with the opening of the urethra on the upper surface of the penis. This is known as ________________.

9.71. Henry Wong's kidneys failed. He is being treated with ________________, which involves the removal of waste from his blood through a fluid exchange in the abdominal cavity.

9.72. Roberta Gridley is scheduled for surgical repair of damage to the ureter. This procedure is a/an ________________.

9.73. When Larry's ________________ blood test showed a very high PSA level, his physician was concerned about the possibility of prostate cancer.

9.74. Dr. Morita's patient was diagnosed as having ________________, which is also known as Bright's disease. This is a type of kidney disease caused by inflammation of the glomeruli that causes red blood cells and proteins to leak into the urine.

9.75. Mrs. Franklin describes her condition as a floating kidney. The medical term for this condition, in which there is a downward displacement of the kidney, is ________________.

Which Is the Correct Medical Term?
Select the correct answer and write it on the line provided.

9.76. Acute renal failure has sudden onset and is characterized by ________________. This condition can be caused by many factors, including a sudden drop in blood volume or blood pressure due to injury or surgery.

anuria
dysuria
enuresis
uremia

9.77. The term ________________ is urinary incontinence during sleep. It is also known as bed-wetting.

nocturnal enuresis
overactive bladder
stress incontinence
urinary incontinence

9.78. The term meaning the distention of the ureter is ________________.

ureteritis
ureterectasis
ureterolith
urethrosthenosis

9.79. The presence of abnormally low concentrations of protein in the blood is known as ________________.

hypertrophy
hyperproteinuria
hypocalcemia
hypoproteinemia

9.80. A specialist in diagnosing and treating diseases and disorders of the kidneys is a/an ________________.

gynecologist
nephrologist
proctologist
urologist
Challenge Word Building
These terms are *not* found in this chapter; however, they are made up of the following familiar word parts. If you need help in creating the term, refer to your medical dictionary.

cyst/o  -cele
nephr/o  -itis
pyel/o  -lysis
ureter/o  -malacia
urethra/o  -ostomy
          -otomy
          -plasty
          -ptosis
          -rrhexis
          -sclerosis

9.81. The creation of an artificial opening between the urinary bladder and the exterior of the body is a/an ____________________________ .

9.82. A surgical incision into the kidney is a/an ____________________________ .

9.83. Abnormal hardening of the kidney is known as ____________________________ .

9.84. Prolapse of the bladder into the urethra is known as ____________________________ .

9.85. A hernia in the urethral wall is a/an ____________________________ .

9.86. The procedure to separate adhesions around a ureter is a/an ____________________________ .

9.87. Abnormal softening of the kidney is known as ____________________________ .

9.88. Inflammation of the renal pelvis and kidney is known as ____________________________ .

9.89. Rupture of the urinary bladder is known as ____________________________ .

9.90. The surgical repair of the bladder is a/an ____________________________ .
Labeling Exercises

Identify the numbered items on the accompanying figure.

9.91. ___________________ gland
9.92. exterior view of the right ___________________
9.93. inferior ___________________
9.94. ___________________
9.95. renal ___________________
9.96. renal ___________________
9.97. abdominal ___________________
9.98. right and left ___________________
9.99. urinary ___________________
9.100. urethral ___________________