The Skeletal 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>3.1. hump</td>
<td></td>
<td>ankyl/o</td>
</tr>
<tr>
<td>3.2. cartilage</td>
<td></td>
<td>arthr/o</td>
</tr>
<tr>
<td>3.3. crooked, bent, or stiff</td>
<td></td>
<td>-um</td>
</tr>
<tr>
<td>3.4. joint</td>
<td></td>
<td>kyph/o</td>
</tr>
<tr>
<td>3.5. noun ending</td>
<td></td>
<td>chondr/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>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6. cranium, skull</td>
<td></td>
<td>cost/o</td>
</tr>
<tr>
<td>3.7. rib</td>
<td></td>
<td>crani/o</td>
</tr>
<tr>
<td>3.8. setting free, loosening</td>
<td></td>
<td>-desis</td>
</tr>
<tr>
<td>3.9. spinal cord, bone marrow</td>
<td></td>
<td>-lysis</td>
</tr>
<tr>
<td>3.10. surgical fixation of a bone or joint</td>
<td></td>
<td>myel/o</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>3.11. vertebra, vertebrae</td>
<td></td>
<td>oste/o</td>
</tr>
<tr>
<td>3.12. curved</td>
<td></td>
<td>spondyl/o</td>
</tr>
<tr>
<td>3.13. bent backward</td>
<td></td>
<td>lord/o</td>
</tr>
<tr>
<td>3.14. synovial membrane</td>
<td></td>
<td>synov/i, synov/o</td>
</tr>
<tr>
<td>3.15. bone</td>
<td></td>
<td>scoli/o</td>
</tr>
</tbody>
</table>
Definitions
Select the correct answer and write it on the line provided.

3.16. The shaft of a long bone is known as the _____________
        diaphysis  distal epiphysis  endosteum  proximal epiphysis

3.17. Seven short ________________ bones make up each ankle.
        carpal  metatarsal  phalanx  tarsal

3.18. The upper portion of the sternum is the ________________
        clavicle  mandible  manubrium  xiphoid process

3.19. A _____________________________ is movable.
        cartilaginous joint  fibrous joint  suture joint  synovial joint

3.20. The _______________________ bone is located just below the urinary bladder.
        ilium  ischium  pubis  sacrum

3.21. The opening in a bone through which the blood vessels, nerves, and ligaments pass
        is a ___________________.
        foramen  foramina  process  symphysis

3.22. A/An _________________________ connects one bone to another bone.
        articular cartilage  ligament  synovial membrane  tendon

3.23. The hip socket is known as the _________________.
        acetabulum  malleolus  patella  trochanter

3.24. The bones of the fingers and toes are known as the _________________.
        carpals  metatarsals  tarsals  phalanges

3.25. A normal projection on the surface of a bone that serves as an attachment for muscles and tendons
        is known as a/an _____________________.
        cruciate  exostosis  popliteal  process

Matching Structures
Write the correct answer in the middle column.

<table>
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<tr>
<th>Definition</th>
<th>Correct Answer</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.26. breastbone</td>
<td></td>
<td>clavicle</td>
</tr>
<tr>
<td>3.27. cheekbones</td>
<td></td>
<td>olecranon process</td>
</tr>
<tr>
<td>3.28. collarbone</td>
<td></td>
<td>sternum</td>
</tr>
<tr>
<td>3.29. kneecap</td>
<td></td>
<td>patella</td>
</tr>
<tr>
<td>3.30. point of the elbow</td>
<td></td>
<td>zygomatic</td>
</tr>
</tbody>
</table>

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

3.31. The surgical procedure for loosening of an ankylosed joint is known as _________________.
        arthrodesis  arthrolysis
3.32. The bone disorder of unknown cause that destroys normal bone structure and replaces it with fibrous (scar-like) tissue is known as __________________________.  
  fibrous dysplasia  Paget's disease

3.33. An __________________________ bone marrow transplant uses bone marrow from a donor.  
  allogenic  autologous

3.34. A percutaneous __________________________ is performed to treat osteoporosis related compression fractures.  
  disectomy  vertebroplasty

3.35. The medical term for the form of arthritis that is commonly known as wear-and-tear arthritis is __________________________.  
  osteoarthritis  rheumatoid arthritis

**Spelling Counts**

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

3.36. The medical term for the condition commonly known as low back pain is lumboaeo.  

3.37. The surgical fracture of a bone to correct a deformity is known as osteclasis.  

3.38. Ankylosing spondilitis is a form of rheumatoid arthritis characterized by progressive stiffening of the spine.  

3.39. An osterraphy is the surgical suturing, or wiring together, of bones.  

3.40. Crepitation is the sound that is heard when the ends of a broken bone move together.  

**Abbreviation Identification**

Write the correct answer on the line provided.

3.41. BMT  
3.42. CR  
3.43. Fx  
3.44. RA  
3.45. TMJ

**Term Selection**

Select the correct answer and write it on the line provided.

3.46. The term meaning the death of bone tissue is __________________________.  
  osteitis deformans  osteomyelitis  osteonecrosis  osteoporosis

3.47. An abnormal increase in the forward curvature of the lower or lumbar spine is known as __________________________.  
  kyphosis  lordosis  scoliosis  spondylisis
3.48. The condition known as __________________________ is a congenital defect.
juvenile arthritis  osteoarthritis  rheumatoid arthritis  spina bifida

3.49. A malignant tumor composed of cells derived from blood-forming tissues of the bone marrow is
known as a/an __________________________.
chondroma  Ewing's sarcoma  myeloma  osteochondroma

3.50. The bulging deposit that forms around the area of the break during the healing of a fractured bone
is a __________________________.
callus  crepitation  crepitus  luxation

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

3.51. A/An __________________________ is performed to treat a patient with craniosenosis or to relieve increased
intracranial pressure.

3.52. The partial displacement of a bone from its joint is known as __________________________.

3.53. The procedure that stiffens a joint or joins several vertebrae is __________________________. This is also
known as surgical ankylosis or fusion.

3.54. The surgical procedure to replace a joint with an artificial joint is known as __________________________.

3.55. A medical term for the condition commonly known as a bunion is __________________________.

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

3.56. A **bursectomy** is the surgical removal of a bursa.

3.57. An **osteochondroma** is a benign bony projection covered with cartilage.

3.58. **Osteomalacia**, also known as adult rickets, is abnormal softening of bones in adults.

3.59. **Periostitis** is an inflammation of the periosteum.

3.60. **Spondylolisthesis** is the forward movement of the body of one of the lower lumbar vertebra on the
vertebra below it.

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

3.61. **True**. Osteopenia is thinner than average bone density. This term is used to describe the condition
of someone who does not yet have osteoporosis, but is at risk for developing it.

3.62. **False**. Paget's disease is caused by a deficiency of calcium and vitamin D in early childhood.
3.63. Costochondritis is an inflammation of the cartilage that connects a rib to the sternum.
3.64. Dislocation is the partial displacement of a bone from its joint.
3.65. Arthroscopic surgery is a minimally invasive procedure for the treatment of the interior of a joint.

**Clinical Conditions**

Write the correct answer on the line provided.

3.66. When Bobby Kuhn fell out of a tree, the bone in his arm was partially bent and partially broken. Dr. Grafton described this as a/an _____________ fracture and told the family that this type of fracture occurs primarily in children.

3.67. Eduardo Sanchez was treated for an inflammation of the bone and bone marrow. The medical term for this condition is _________________.

3.68. Beth Hubert's breast cancer spread to her bones. These new sites are referred to as _________________.

3.69. Mrs. Morton suffers from dowager's hump. The medical term for this abnormal curvature of the spine is _________________.

3.70. Henry Turner wears a brace to improve the impaired function of his leg. The medical term for this orthopedic appliance is a/an _________________.

3.71. As the result of a head injury in an auto accident, Cheng required a/an _________________ to relieve the rapidly increasing intracranial pressure within his skull.

3.72. Mrs. Gilmer has leukemia and requires a bone marrow transplant. Part of the treatment was the harvesting of her bone marrow so she could receive it later as a/an _________________ bone marrow transplant.

3.73. Betty Greene has been running for several years; however, now her knees hurt. Dr. Morita diagnosed her condition as _________________, which is an abnormal softening of the cartilage in these joints.

3.74. Patty Turner (age 7) has symptoms that include a skin rash, fever, slowed growth, fatigue, and swelling in the joints. She was diagnosed as having juvenile _________________ arthritis.

3.75. Heather Lewis has a very sore shoulder. Dr. Plunkett diagnosed this as an inflammation of the bursa and said that Heather's condition is _________________.

**Which Is the Correct Medical Term?**

Select the correct answer and write it on the line provided.

3.76. Rodney Horner is being treated for a _________________ fracture in which the ends of the bones were crushed together.

   Colles'  comminuted  compound  spiral

3.77. Alex Jordon fell and injured her knee. Her doctor performed a/an _________________ to surgically repair the damaged cartilage.

   arthroplasty  chondritis  chondroplasty  osteoplasty
3.78. Mrs. Palmer is at high risk for osteoporosis. To obtain a definitive evaluation of the status of her bone density, Mrs. Palmer's physician ordered a/an ______________________ test.

- dual x-ray absorptiometry
- MRI
- x-ray
- ultrasonic bone density

3.79. In an effort to return a fractured bone to normal alignment, Dr. Wong ordered ______________________. This procedure exerts a pulling force on the distal end of the affected limb.

- external fixation
- immobilization
- internal fixation
- traction

3.80. Baby Juanita was treated for ______________________, which is a congenital deformity of the foot involving the talus (ankle bones). Her family calls this condition clubfoot.

- osteomalacia
- rickets
- scoliosis
- talipes

**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.

- poly-
- arthr/o
- chondr/o
- cost/o
- crani/o
- oste/o

- -ectomy
- -itis
- -malacia
- -otony
- -pathy
- -sclerosis

3.81. Abnormal hardening of bone is known as ______________________.

3.82. The surgical removal of a rib or ribs is a/an ______________________.

3.83. Any disease of cartilage is known as ______________________.

3.84. A surgical incision into a joint is a/an ______________________.

3.85. Inflammation of cartilage is known as ______________________.

3.86. The surgical removal of a joint is a/an ______________________.

3.87. Inflammation of more than one joint is known as ______________________.

3.88. Any disease involving the bones and joints is known as ______________________.

3.89. A surgical incision or division of a rib or ribs is a/an ______________________.

3.90. Abnormal softening of the skull is known as ______________________.
Labeling Exercises
Identify the numbered items on the accompanying figures.

3.91. _______________ vertebrae
3.92. _______________
3.93. _______________

3.94. _______________
3.95. _______________
3.96. _______________
3.97. _______________ bone
3.98. _______________ bone
3.99. _______________ bone
3.100. _______________