This is your Anatomy and Physiology Mid-term.

Run for your lives!!! (Just Kidding)

Matching - Anatomy or Physiology?

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
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<tbody>
<tr>
<td>1. Study of structure</td>
<td>A. Anatomy</td>
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<tr>
<td>2. muscle actions</td>
<td>B. Physiology</td>
</tr>
<tr>
<td>3. Brain Function</td>
<td></td>
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<tr>
<td>4. Where your quadriceps are.</td>
<td></td>
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<tr>
<td>5. Types of tissues in your stomach</td>
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<tr>
<td>6. How many teeth you have</td>
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Multiple choice - characteristics of life

7. Which of the following is a characteristic of life?
   a. breathing   b. live birth   c. responsiveness
   d. intercourse

8. The ability of an organism to break down food to release energy is
   a. Respiration   b. responsiveness   c. reproduction
   d. none of these

9. Which of the following is a characteristic of humans but not
   of all living things?
   a. breathing   b. excretion   c. reproduction   d. death

10. Excretion is one of the sub-steps of:
   a. reproduction   b. homeostasis   c. movement
    d. metabolism

11. Your body's uptake of nutrients into the cells is:
    a. Assimilation   b. Digestion   c. Respiration

12. Respiration is done for what purpose?
    a. to get energy   b. to remove waste   c. to create $CO_2$

True or False - requirements of life

13. Water makes up approximately 70% of your body mass
14. Water serves to help circulate things around within you.
15. Food provides you with raw materials but not energy that your body needs.
16. During energy production within your cells, the amount of oxygen is unimportant.
17. Glucose is the sugar of choice for human beings.
18. The colder your body gets, the more efficiently you are able to carry out important
    reactions.
19. Only mammals require any heat to function.
Multiple choice - homeostasis

20. The goal of homeostasis is to __________ your body's chemical and physical characteristics.
   A. Move     b. Grow     c. Balance     d. circulate

21. One example of a condition which would require a response is:
   a. falling body temperature  b. lack of light
   c. low blood sugar  d. all of the above

Matching - body cavities

22. Liver  a. Cranial
23. Uterus  b. Abdominal
24. Spinal Cord  c. pelvic
25. Lungs  d. Thoracic
26. Tongue  e. None of these

True or False - anatomical directions

27. Superior means toward the midline.
28. Your elbow is proximal to your finger.
29. Your vertebral column is posterior to your nose.
30. Your little toe is medial to your big toe.
31. Your eyes are lateral to your ears.

Multiple Choice - levels of organization

32. The simplest level of matter is the:
   ______ a. Molecule  b. Atom  c. Protein  d. cube

33. Cells are made of _______ put together, according to the _______ levels of organization.
   ______ a. Many molecules  b. Many atoms  c. Many tissues

34. Many tissues which work together form an:
   ______ a. Tissue  b. System  c. Organ  d. macromolecule

35. A protein is an example of a:
   ______ a. Atom  b. Macromolecule  c. tissue
36. – 45. Anatomical Regions
Refer to this list of body regions to identify the labeled locations on the accompanying diagrams, all are used once and no more than once!

a. femoral  b. acromial  c. abdominal  d. pelvic
e. costal  ab. occipital  ac. lumbar
ad. lumbar  ae. pedal  bc. axillary  bd. carpal
be. sternal  cd. Brachial  ce. Pectoral

True or False - Cell Structure

46. The cell membrane surrounds and protects the cell
47. The cell membrane is a semi-permeable barrier.
48. The Golgi body is involved with respiration.
49. The ribosome prepares cats for ritualistic, pagan dissection at the hands of anatomy students.
50. The mitochondria are the site of external transport of cell products.

Multiple Choice - Tissue types - epithelial

51. Simple cuboidal cells look like:
   A. square boxes       b. Frisbees       c. logs       d. Adam Sandler
52. Cells which are flat in shape are probably:
   a. Simple columnar   b. areolar   c. squamous   d. Recently hit by a car

53. Pseudostratified means that:
   a. All cells are not really ciliated   b. fake cells are layered on top of real ones
   c. all cells are missing a nucleus   d. all cells look layered, but aren’t

54. Which type of epithelial tissue has the ability to change shape when stretched?
   a. Stratified columnar   b. Strat. transitional   c. Strat. squamous
   d. Strat. cuboidal

55. Filtration is the main function of:
   a. Cuboidal   b. columnar   c. squamous

56. Trapping dust in the air you breathe is done by:
   a. Pseudostratified columnar   b. cuboidal   c. transitional

57. Which tissue lines the inside of your mouth?
   a. Simple squamous   b. stratified squamous   c. simple columnar
   d. stratified columnar

58. Where do you find Pseudostratified columnar?
   a. Liver   b. skin   c. trachea   d. feet

59. Your bladder is lined with this cell:
   a. Transitional   b. columnar   c. cuboidal

Multiple choice - Connective Tissue Structure

60. The tissue that is a network of loosely arranged collagen and elastin fibers is...
   a. Areolar   b. Adipose   c. fibrocartilage   c. hyaline

61. The type of muscle tissue that has no striations is called.
   a. Skeletal   b. smooth   c. Cardiac

62. The Tissue that has calcium salts in its matrix is...
   a. Vascular   b. Osseous   c. Elastic   d. cardiac

63. Elastic cartilage is similar to which other cartilage with the exception of the elastic fibers?

64. The tissue whose vacuoles have pushed the nucleus and cytoplasm to one side is...
   a. Adipose   b. Areolar   c. connective   d. Dense Regular
Matching - Tissue Functions

<table>
<thead>
<tr>
<th>A</th>
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<tbody>
<tr>
<td>Areolar</td>
<td>A. Support for ears, trachea</td>
</tr>
<tr>
<td>Adipose</td>
<td>B. Attaches Bone-to-Bone</td>
</tr>
<tr>
<td>Dense Regular</td>
<td>C. Cushions joints</td>
</tr>
<tr>
<td>Vascular</td>
<td>D. Conscious Movements</td>
</tr>
<tr>
<td>Cardiac</td>
<td>E. Storage, Insulation</td>
</tr>
<tr>
<td>Hyaline</td>
<td>AB. Binding of skin/muscle</td>
</tr>
<tr>
<td>Skeletal</td>
<td>AC. Forms Trachea (windpipe)</td>
</tr>
<tr>
<td></td>
<td>AD. Carry Food, Oxy., waste</td>
</tr>
<tr>
<td></td>
<td>BC. Causes blood to move</td>
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Matching - Location

<table>
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<tr>
<td>Areolar</td>
<td>A. Heart</td>
</tr>
<tr>
<td>Cardiac</td>
<td>B. ends of bones</td>
</tr>
<tr>
<td>dense regular</td>
<td>C. Intervertebral Disks</td>
</tr>
<tr>
<td>hyaline cartilage</td>
<td>D. Tendons</td>
</tr>
<tr>
<td>Osseous</td>
<td>E. Bones</td>
</tr>
<tr>
<td></td>
<td>ab. Under skin</td>
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Multiple Choice - Minky Questions

77. Which is not a clean up responsibility in the back room?
   a. clean drains  b. put instruments in dishwasher  c. wipe off counter

78. Your cats had their necks and stomachs cut because:
   a. it is how they were killed  b. It is where they were injected with dye  c. it makes it easier to see the internal organs

79. Bubble in all of the things that should be in your drawer?
   a. probe  b. manual  c. Pencil/pen  c. sponge  d. apron

True or False - Skeletal system I.

80. A bone's primary function is support/protection.
81. Bone marrow is found in the medullary cavity.
82. Your facial bones are irregular bones.
83. Your Pelvis is a sesamoid bone.
84. A short bone is not attached to any other bones.
85. Long bones are the "stereotypical bones".
86. Your wrist bones are short bones.
87. Your fingers are flat bones.
89 - 98 Label the bone structure diagrams using the word bank
a. diaphysis  b. Spongy bone  c. Haversian canal
d. Epiphysial plate  e. Epiphysis  ab. Matrix  ac. osteocyte
ad. lacunae  ae. canalicule  bc. blood/nerve
bd. lamella

True or false - intermembrane vs. endochondrial ossification
IM = intermembrane  EC = Endochondrial

99. EC forms cranial bones.
100. Bone formation begins with Hyaline cartilage in EC ossification.
101. Spongy bone forms first, then compact during both types of ossification.
102. IM happens in all long bones.
Multiple Choice - Broken Bones

103. A break which is all the way through a bone is a:
   a. Complete   b. Greenstick   c. Lateral   d. simple

104. A break which smashes the bone into many pieces is a:
   a. Spiral   b. Oblique   c. commuted   d. open

105. A break caused by a twisting motion is a:
   a. commuted   b. spiral   c. stress   d. greenstick

106. A break often associated with the bendable bones of babies and small children:
   a. Transverse   b. open   c. stress   d. greenstick

107. A minor break often caused by the pounding of running is a:
   a. stress   b. open   c. closed   d. commuted

108. A fracture that breaks the skin is very dangerous. It is known as a:
   a. Spiral   b. Transverse   c. Open   d. closed

True or False - Fracture Repair

109. The first thing that happens immediately following a fracture is the stoppage of bleeding.

110. The growth of spongy bone in the fracture site marks the point where a doctor will remove a cast from the patient.

111. The two broken surfaces of the bone must be touching one another for healing to be possible.

112. The oversized lump of bone that surrounds the fracture after all healing has finished is called a callous.

113. The process of slowly removing that oversized callous patch is called remodeling.

There are no questions between 114 and 122. Please skip ahead on the answer sheet to number 123 and continue with the bone diagrams on the next page.
123-128 Skeletal Completion with a word bank - upper body (B = Bone)

a. Humerus  b. temporal  c. parietal  d. head  e. Corocoid process
ab. Scaphoid  ac. radius  ad. hamate  ae. Costal  bc. Olacranon process
bd. Sphenoid  be. capitulum  cd. medial epichondyle  ce. Scapula  de. maxilla
129-135 Completion with a word bank - lower body

a. Femur   b. Tibia   c. lateral chondyle   d. head   e. Ilium   ab. acetabulum
ac. Talus   ad. Sacrum   ae. Interchondyloid eminence   bc. Lumbar vertebrae
bd. fibula   be. patella   cd. symphesis pubis   ce. obturator foramen   de. navicular

True or False - Muscular Structure

136. Voluntary muscles are ones that can be controlled.
137. Your heart is a voluntary muscle.
138. Tendons attach muscles to bones.
139. The end of a muscle attached to the bone which moves is the insertion.

Multiple Choice - 3 main joint types

140. Which type of joint allows only a little movement?
   a. Synarthrotic   b. Amphiarthrotic   c. Diarthrotic

141. Which type of joint forms the joints of your facial and cranial bones?
   a. Synarthrotic   b. Amphiarthrotic   c. Diarthrotic

142. Which type of joint is the least rigid and allows the most movement?
   a. Synarthrotic   b. Amphiarthrotic   c. Diarthrotic

143. Which type of joint forms things like your knee and elbow?
   a. Synarthrotic   b. Amphiarthrotic   c. Diarthrotic

Matching - Examples of moveable joints

144. Hip   b. Condyloid
145. Knee   b. Saddle
146. Phalanges/metacarpals (2nd-5th)   c. Hinge
147. Atlas(C1)/Axis(C2)   d. Ball and Socket
148. Phalange/Metacarpal (1st)   e. Gliding
149. Between individual tarsals   f. Pivot
150. Tibia/Fibula   g. None of these
True or False - Range of movement

13. A hinge joint can flex, extend, and rotate.
14. A ball and socket joint can move in every possible anatomical direction.

152-160 Upper body muscles - completion

e. Latissimus dorsi  ab. Triceps brachii  ac. Brachialis  ad. Pectoralis major
ae. Brachioradialis  bc. Teres major  bd. Rectus abdominus
be. External Oblique

161-169 Lower body muscles - completion

e. Vastus medialis  ab. Rectus femoris  ac. Gracilis  ad. Tensor fascia latae
ae. Gastrocnemius  bc. Soleus  bd. Gluteus medius  be. Semimembranosus