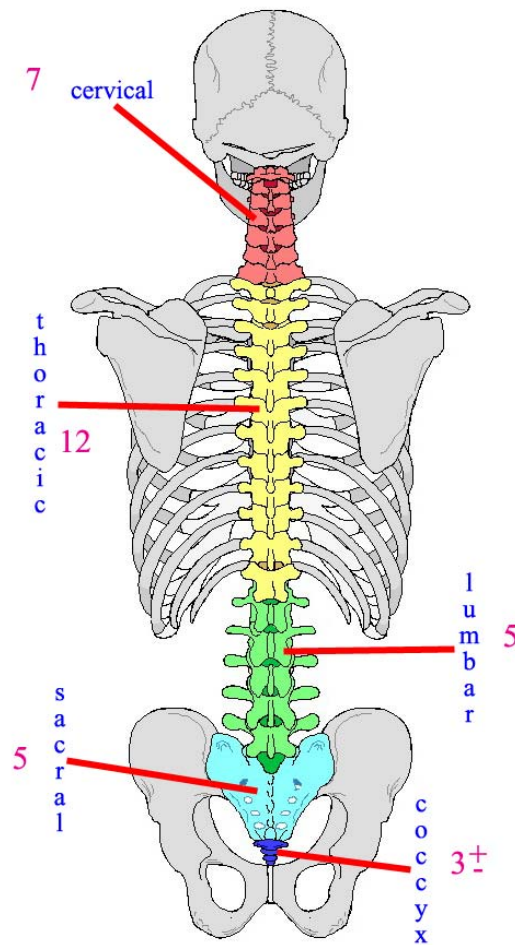


# The Skeletal Organization of the Human Body

## Introduction

Anyone studying to be a health care provider at any level may ask, “Why do I need to know anything about the bones in the human body?” This is a very good question and the answer is that in order to understand how the body is “put together”, one must have an understanding of the supporting framework of the body. Additionally, the bones anchor muscles which, often times, are the sole landmarks a health care provider needs to find a vein from which to remove a blood sample.

One example of the organization of the skeletal system is illustrated in the graphic, below:



This organization illustrates how the spinal cord and brain are protected – it also illustrates how the spine is vulnerable, as well, e.g., lifting incorrectly can cause horrific pain, whereas lifting correctly will maintain the integrity of the back:



Incorrect Lifting



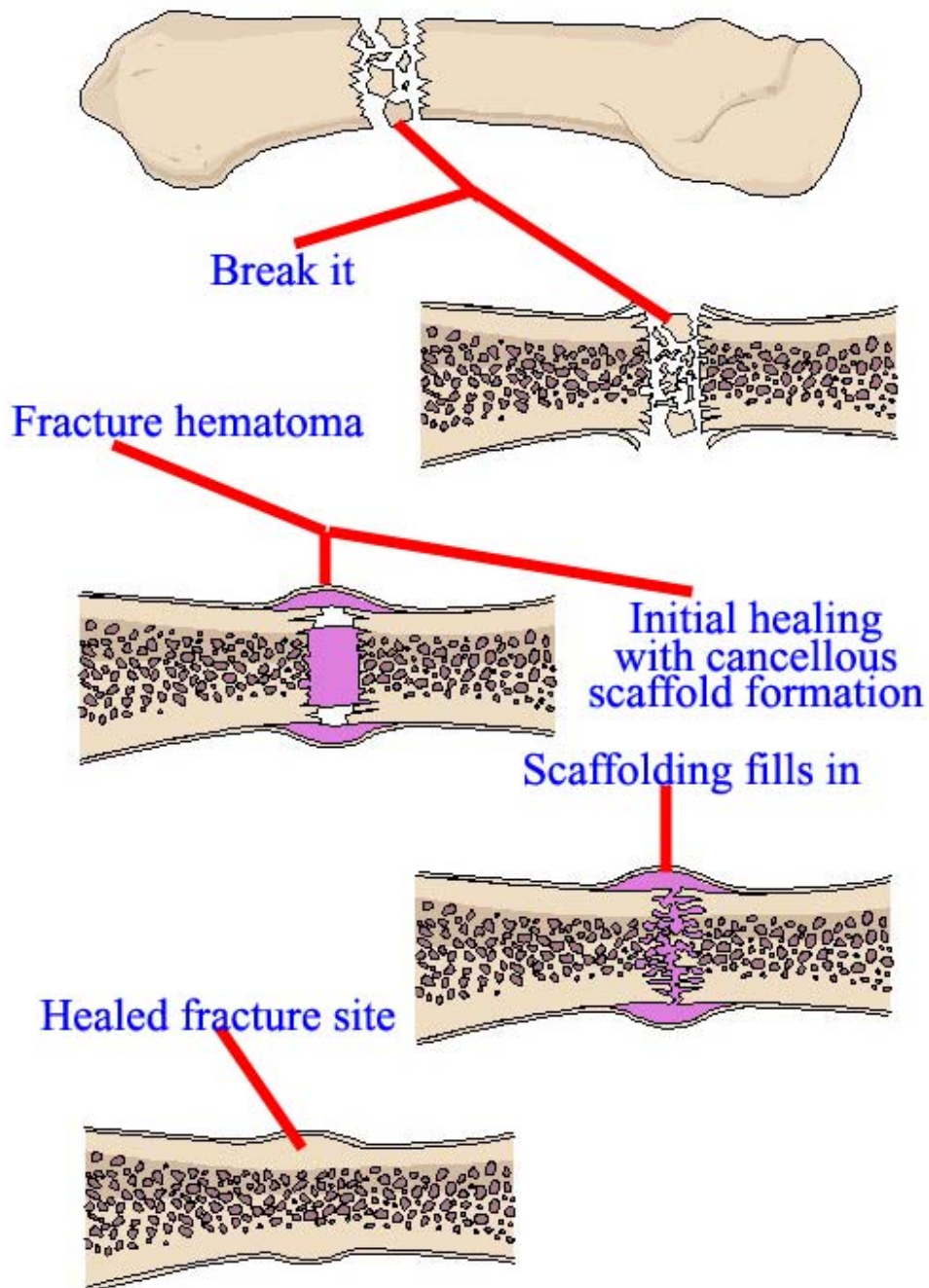
Correct Lifting

There are three curvatures of the spine that are important to know, as well:

<p><b>Kyphosis</b>                      <b>Lordosis</b></p> <p>Kyphosis (left) is anterior curvature of the thoracic spine (sometimes called a hump-back); Lordosis is posterior curvature of the lumbar spine (sometimes called swayback).</p>	<p>Scoliosis is lateral curvature of the spine – note the <b>red line</b> above – that is where the vertebral column is “supposed” to be.</p>

The last “detail” regarding bones has to do with fracture repair. In the graphic, below, a very superficial rendition of the events from fracture to repair is illustrated. Note that there is a “bulge” in the healed bone. The younger one is, the less likely that bulge will be present;

conversely, the older one is when a bone is fractured, the more likely that “bulge” will remain at the healed fracture site.



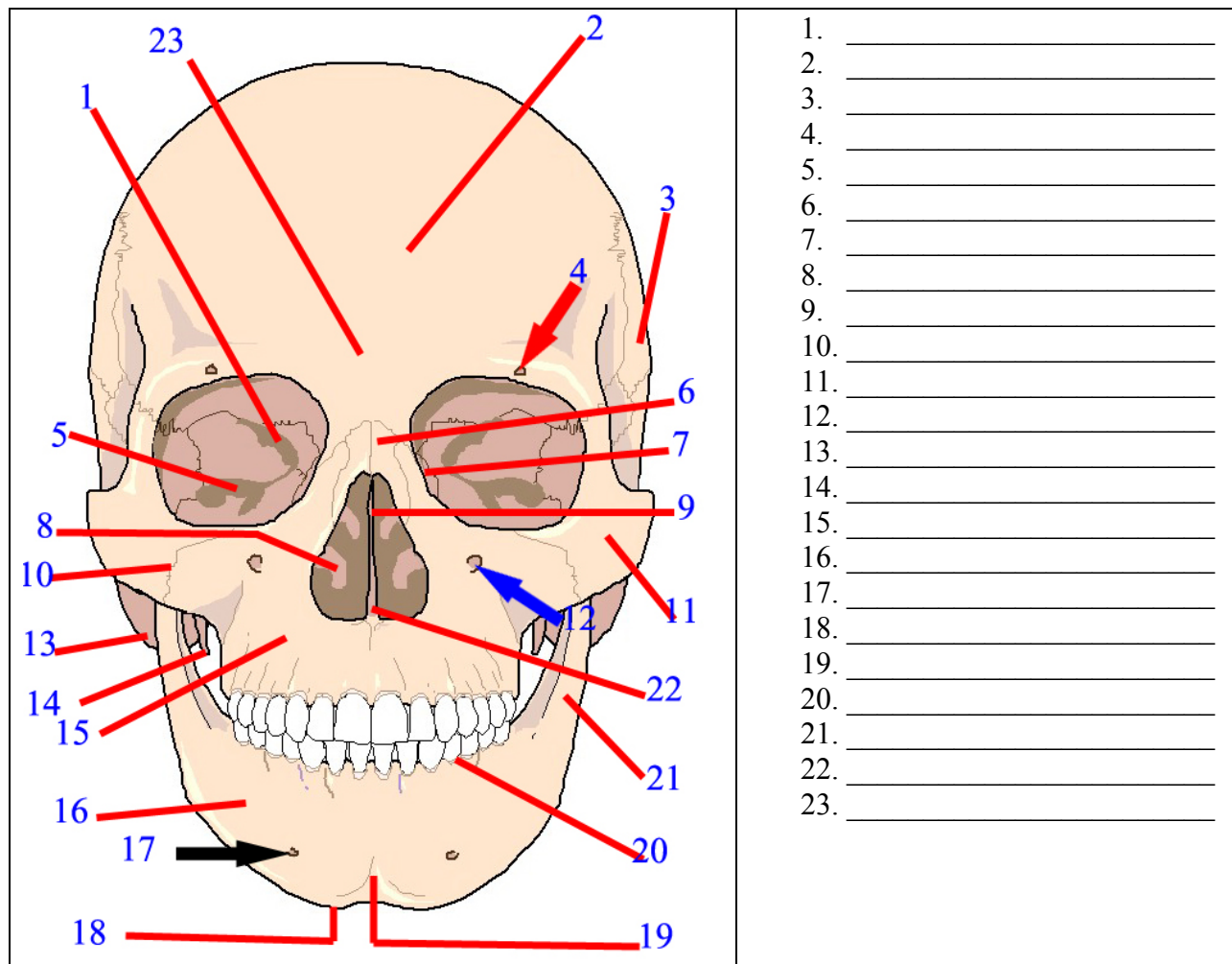
This experiment is your opportunity to take what is in your textbooks and your lectures and apply it to an articulated and dis-articulated skeleton.

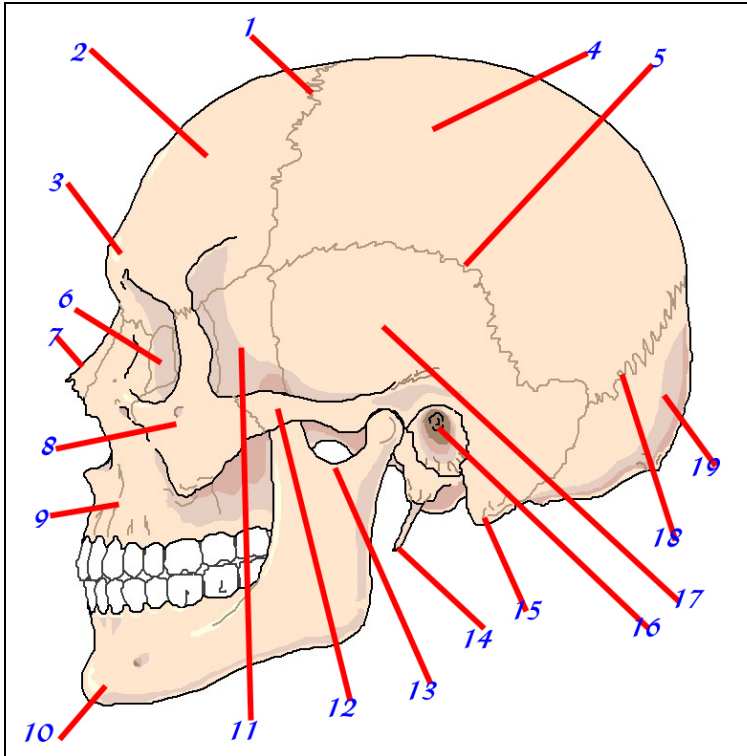
## Experimental

Using your texts and lecture materials, study the skeletons and complete the exercises, below. I can not stress how important it is to know the skeleton “cold” – without that fundamental knowledge, you will find the articulations and muscles very difficult, if not downright impossible to learn.

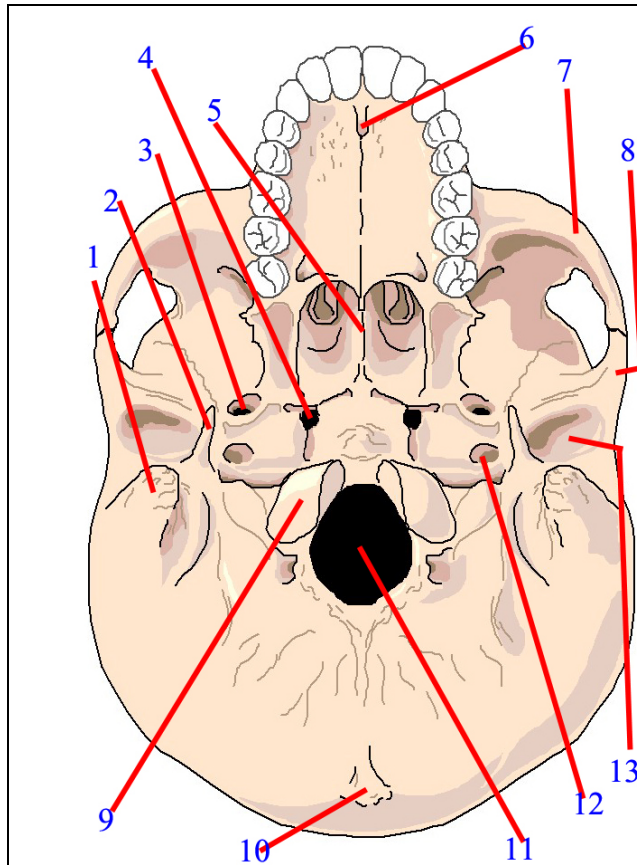
## Exercises

Label all of the following diagrams using the models and your texts and lecture materials.



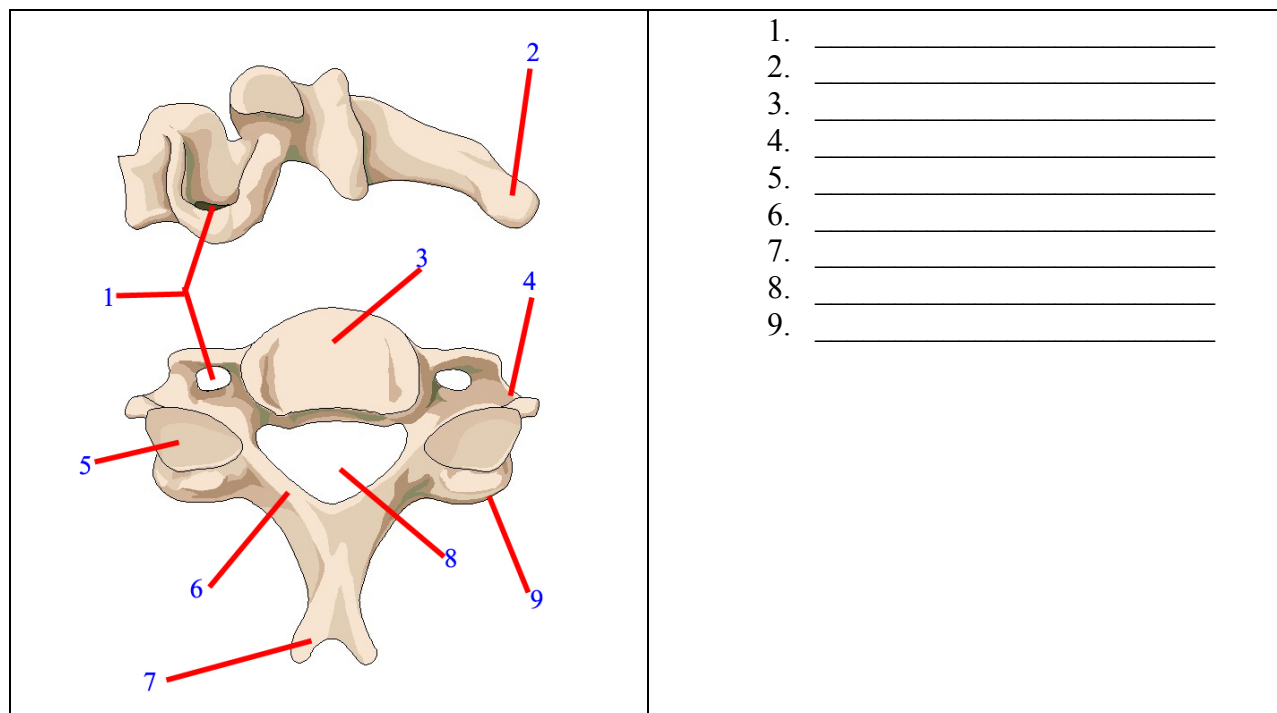


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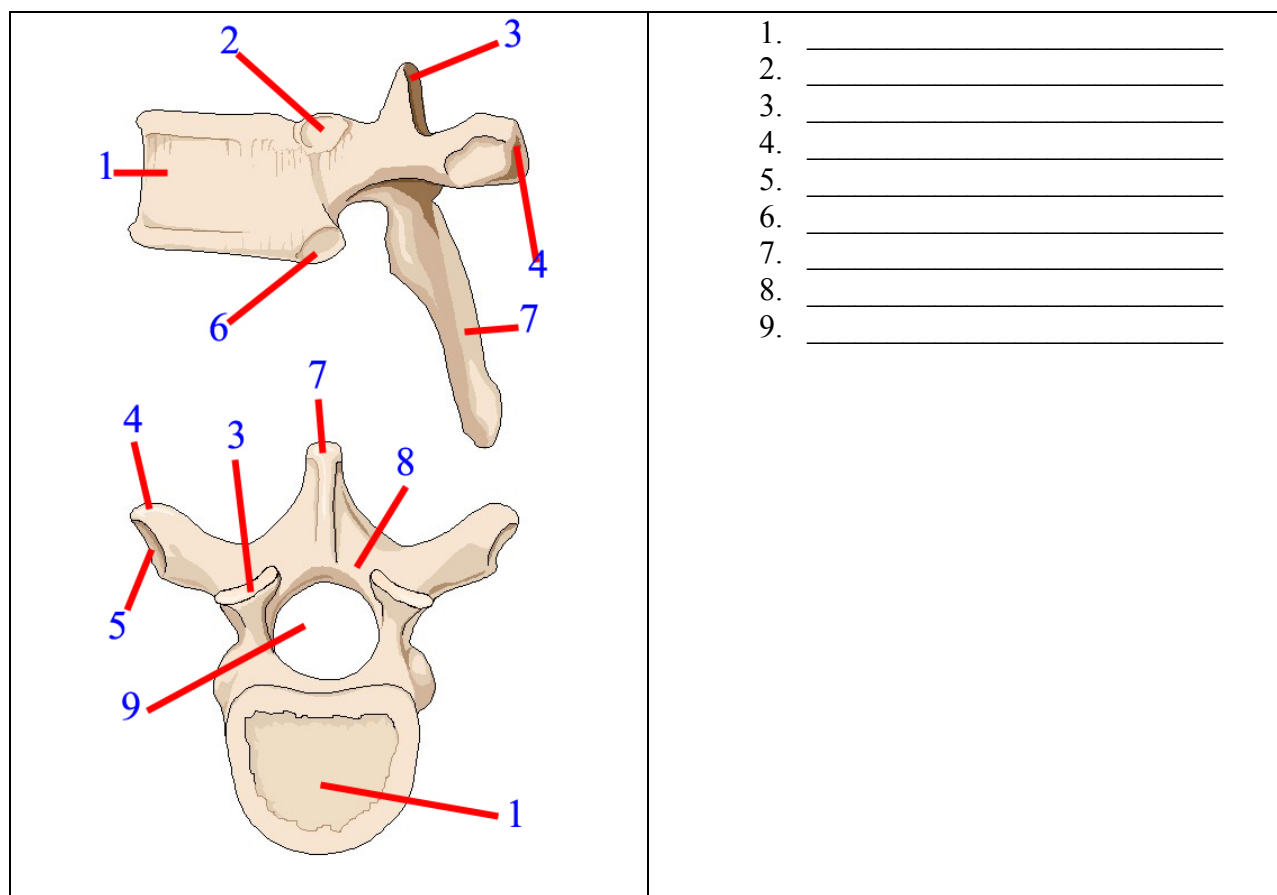


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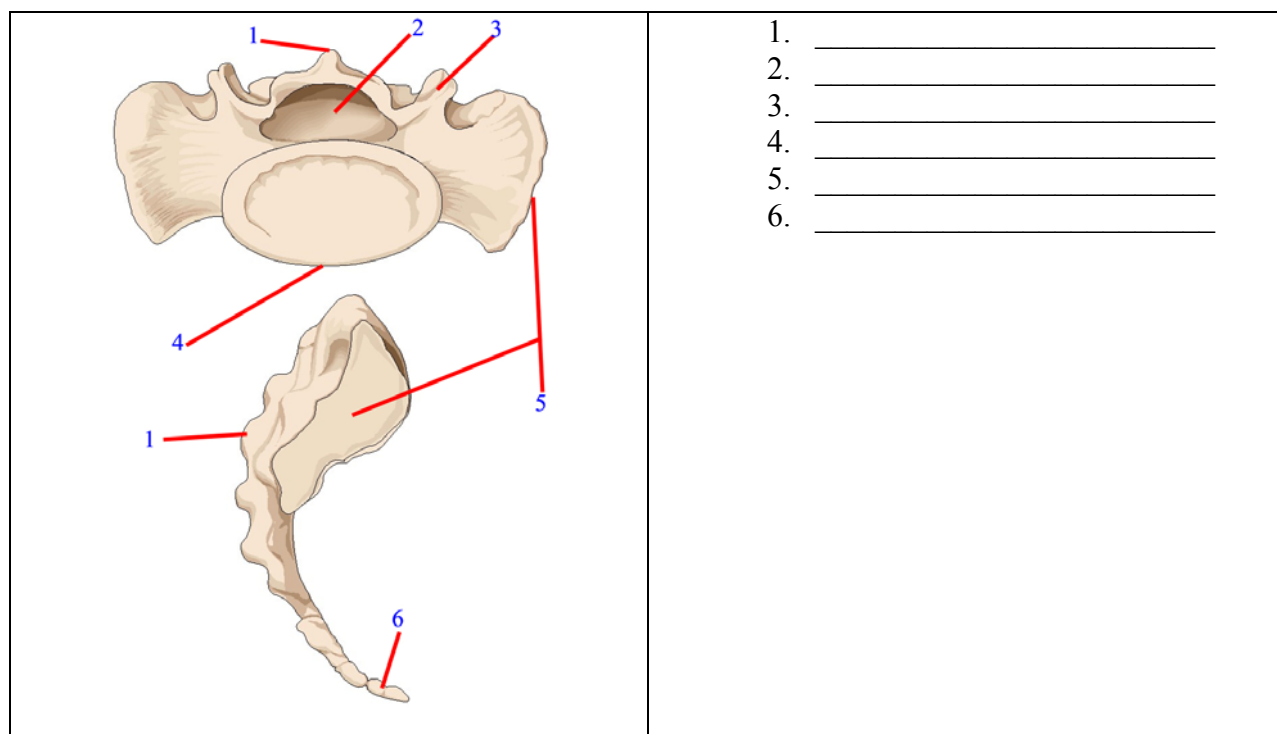
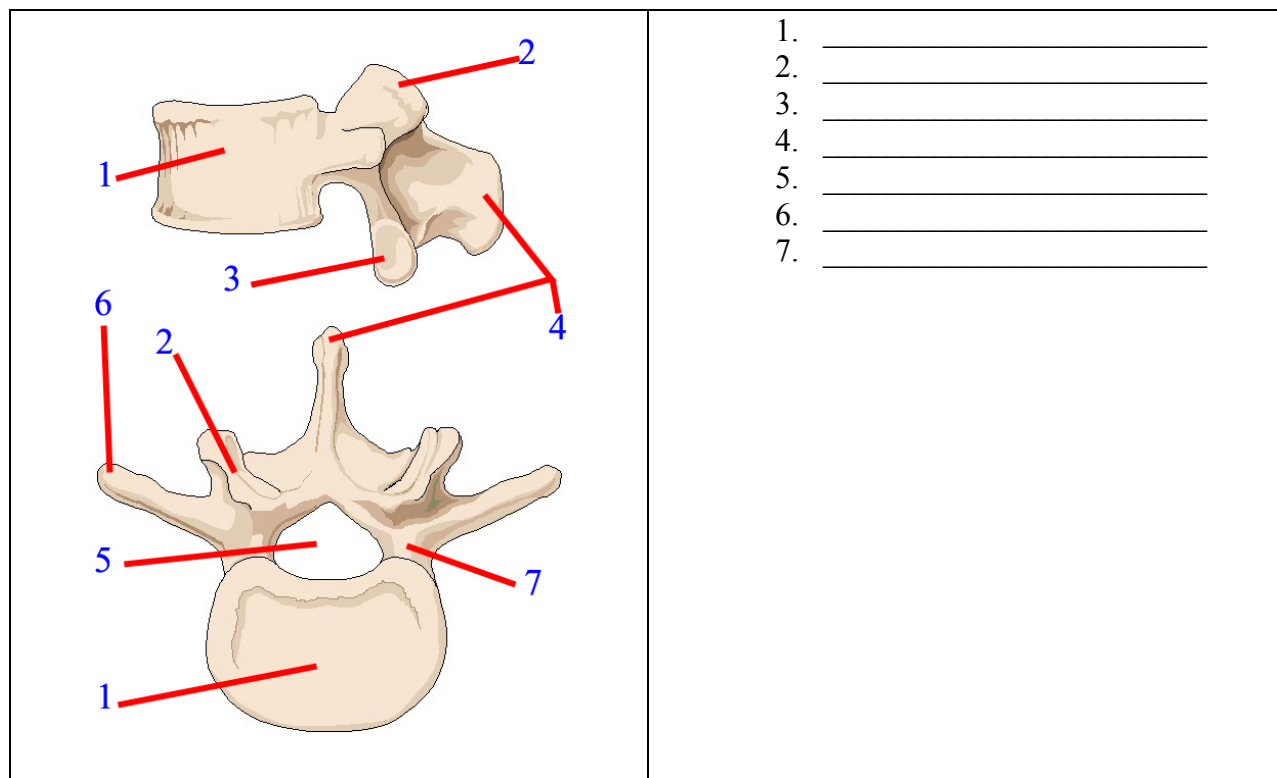


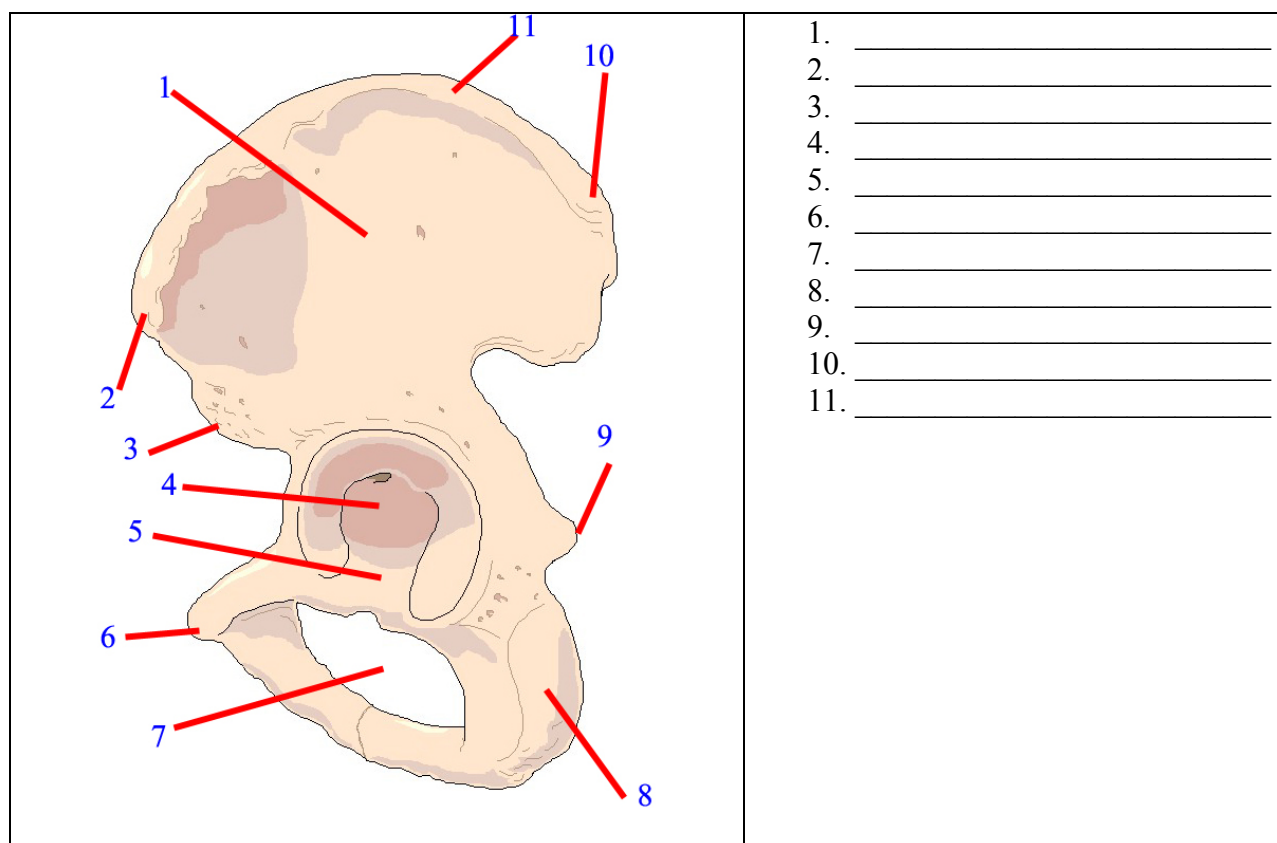
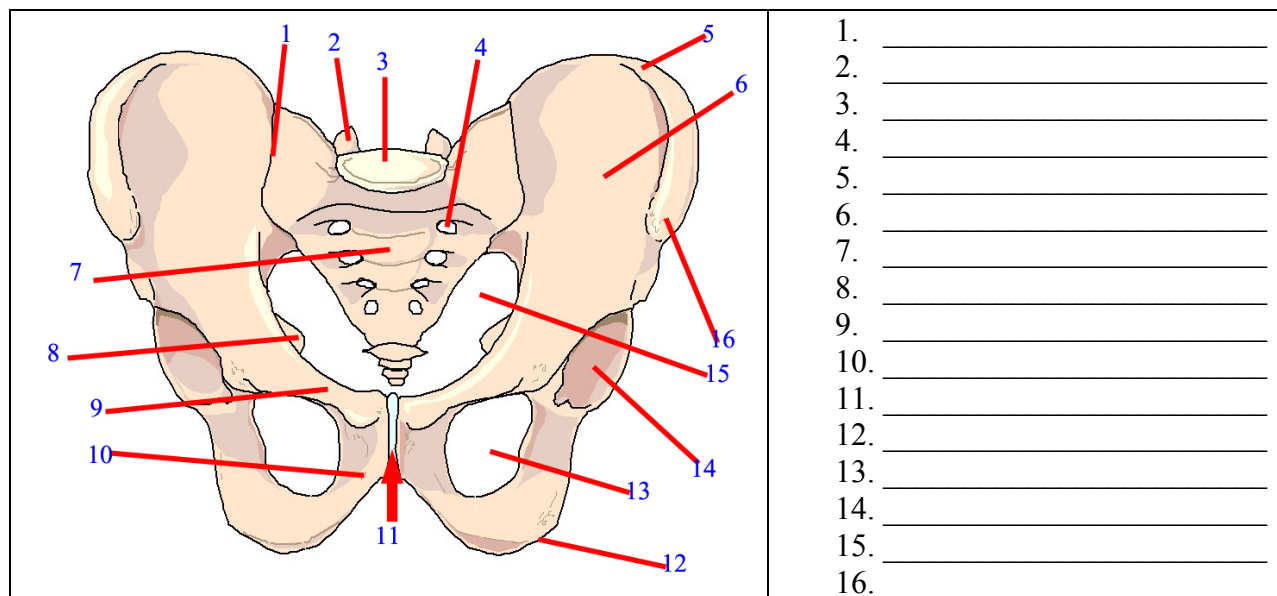


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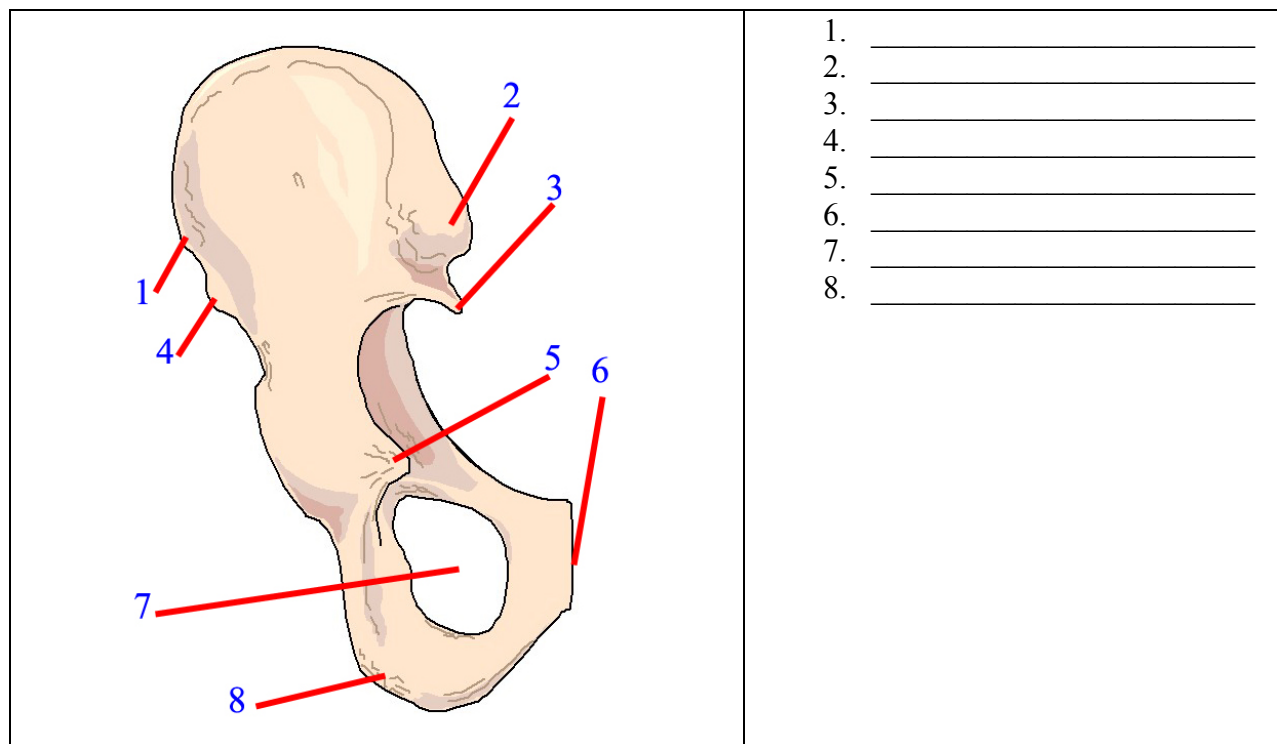


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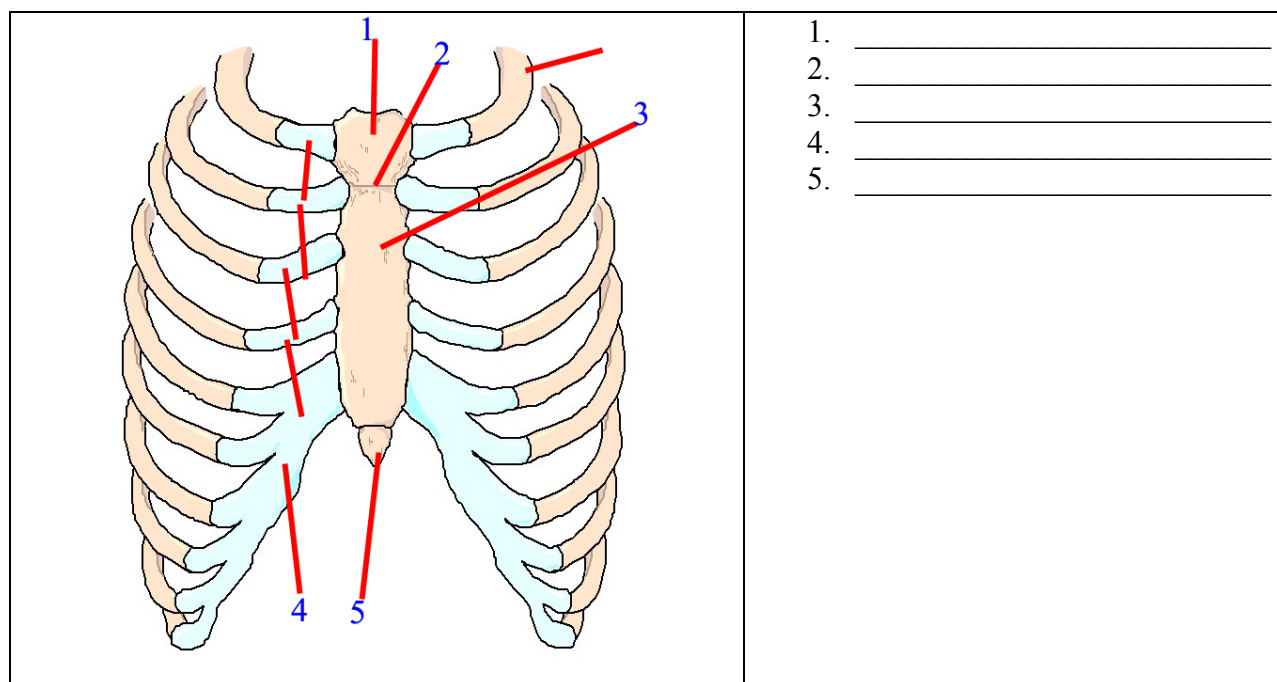




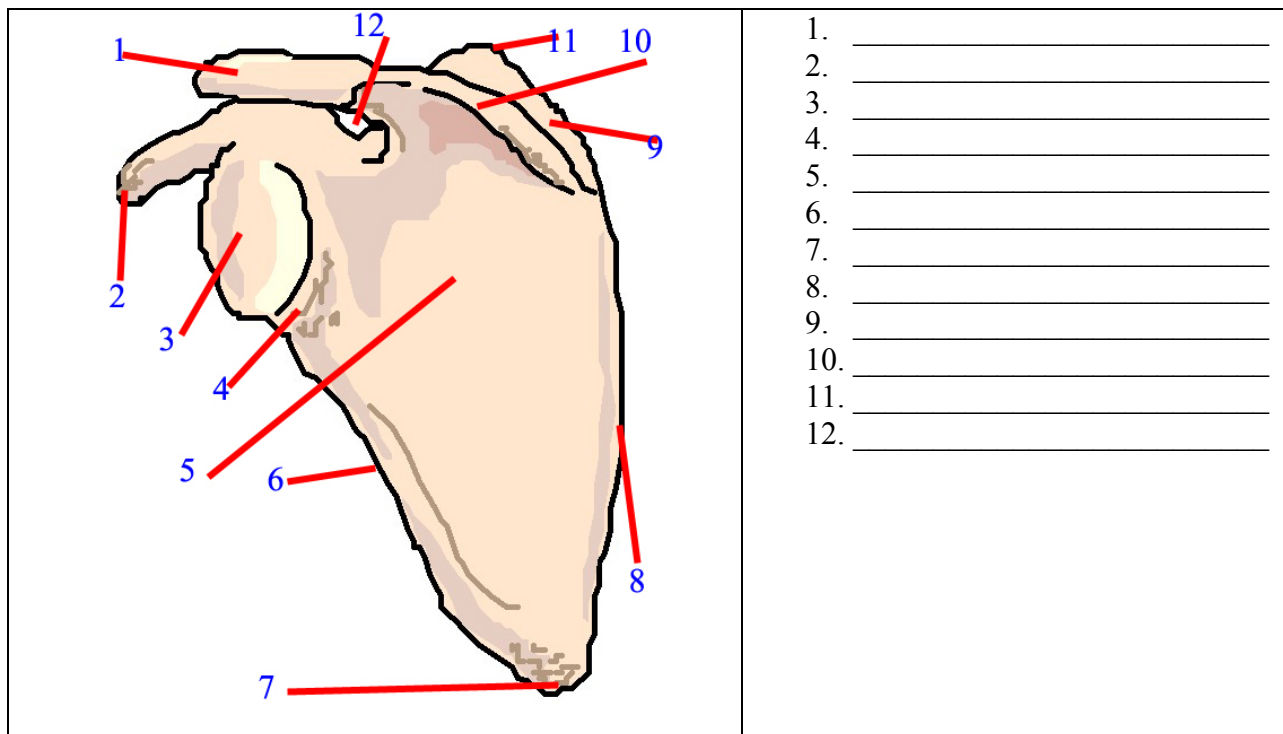
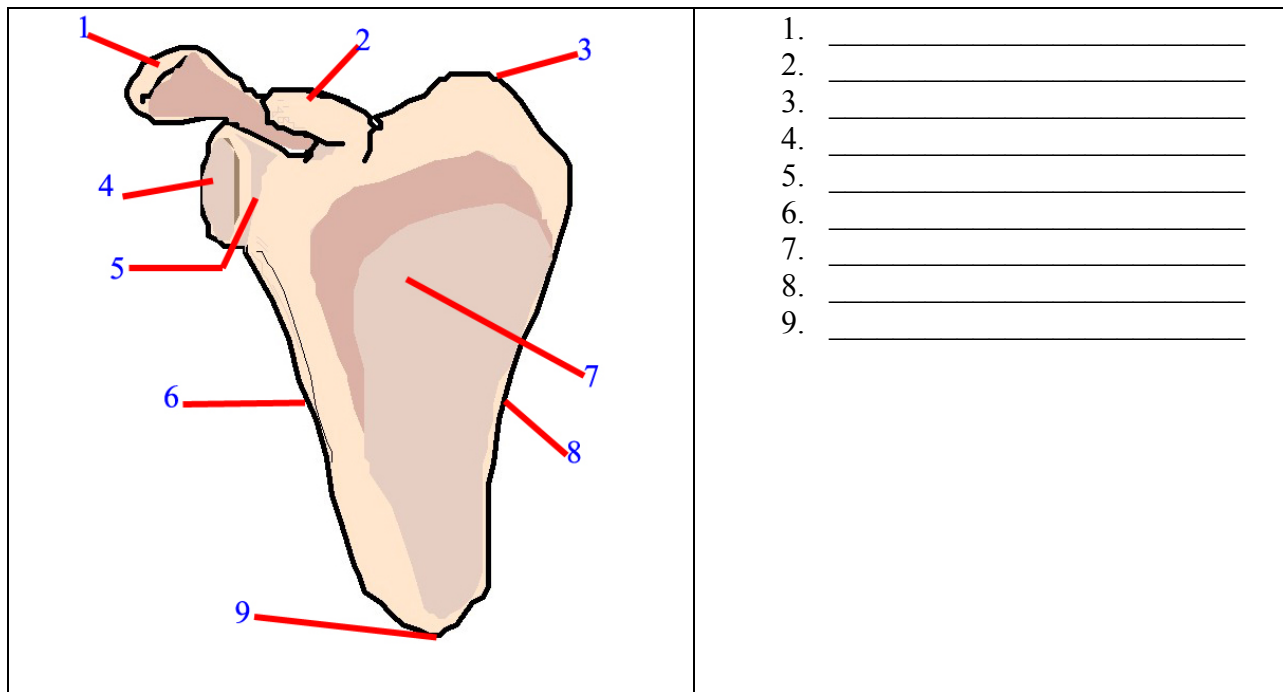


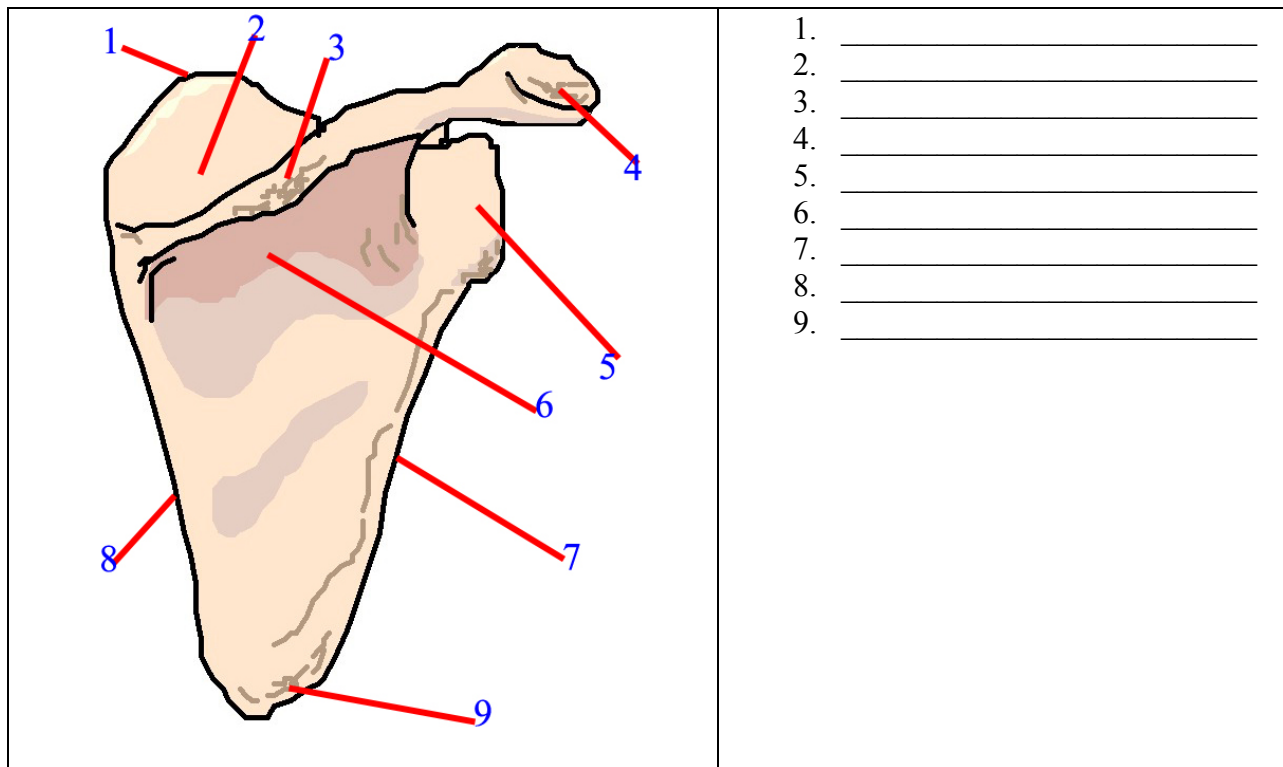


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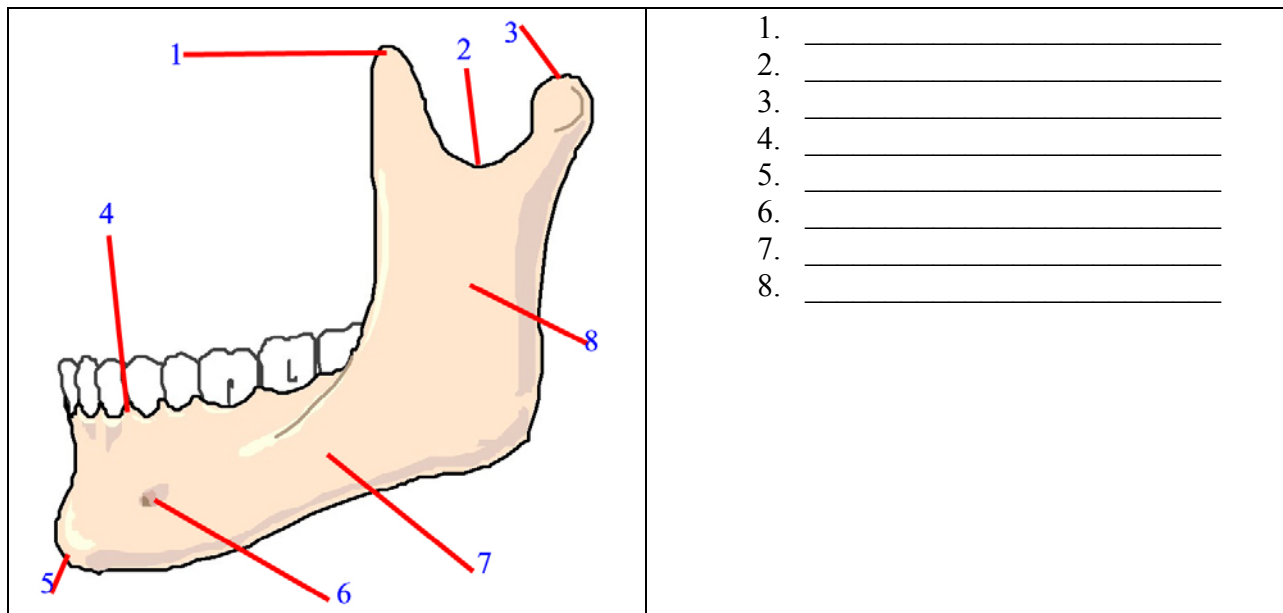


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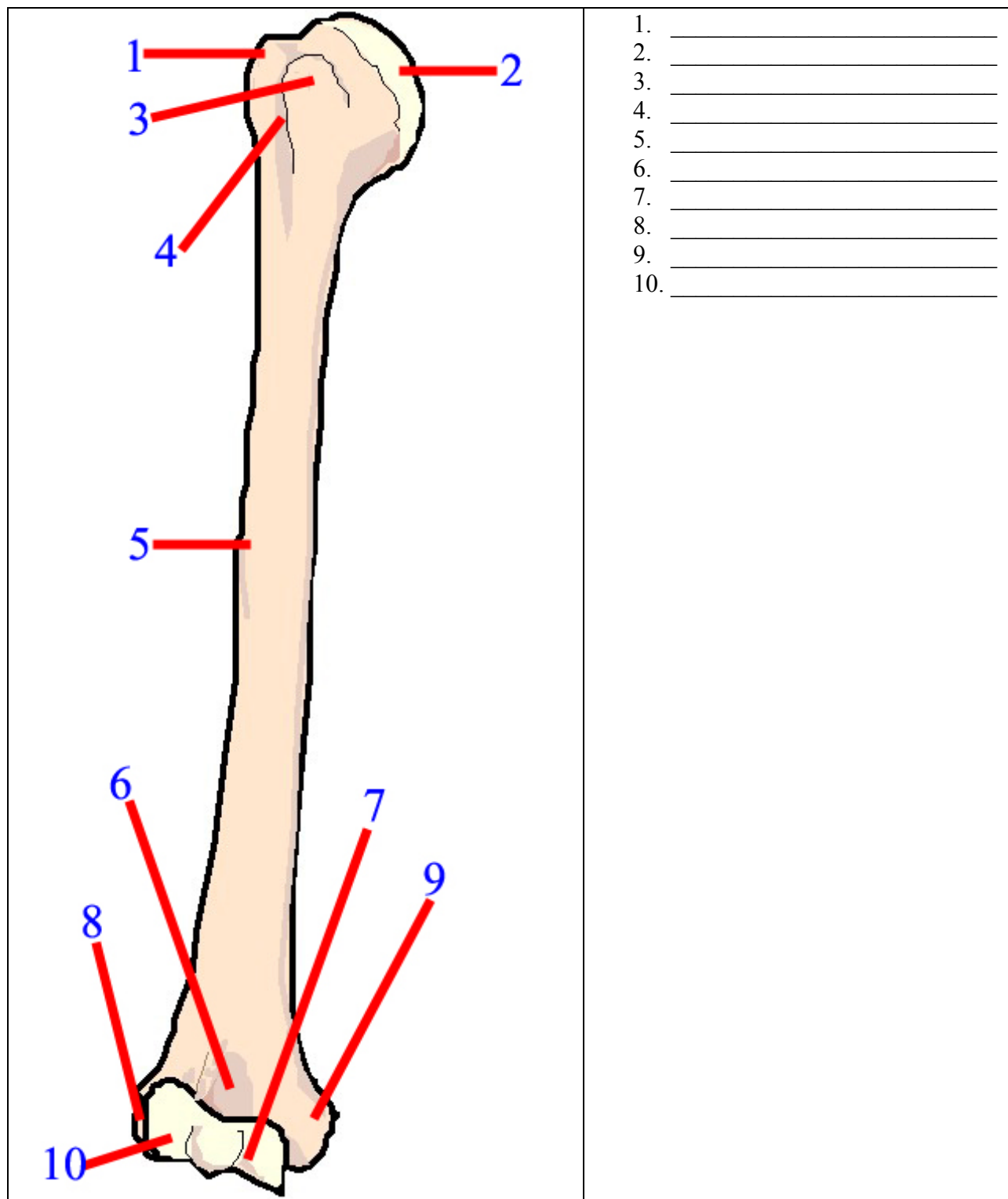


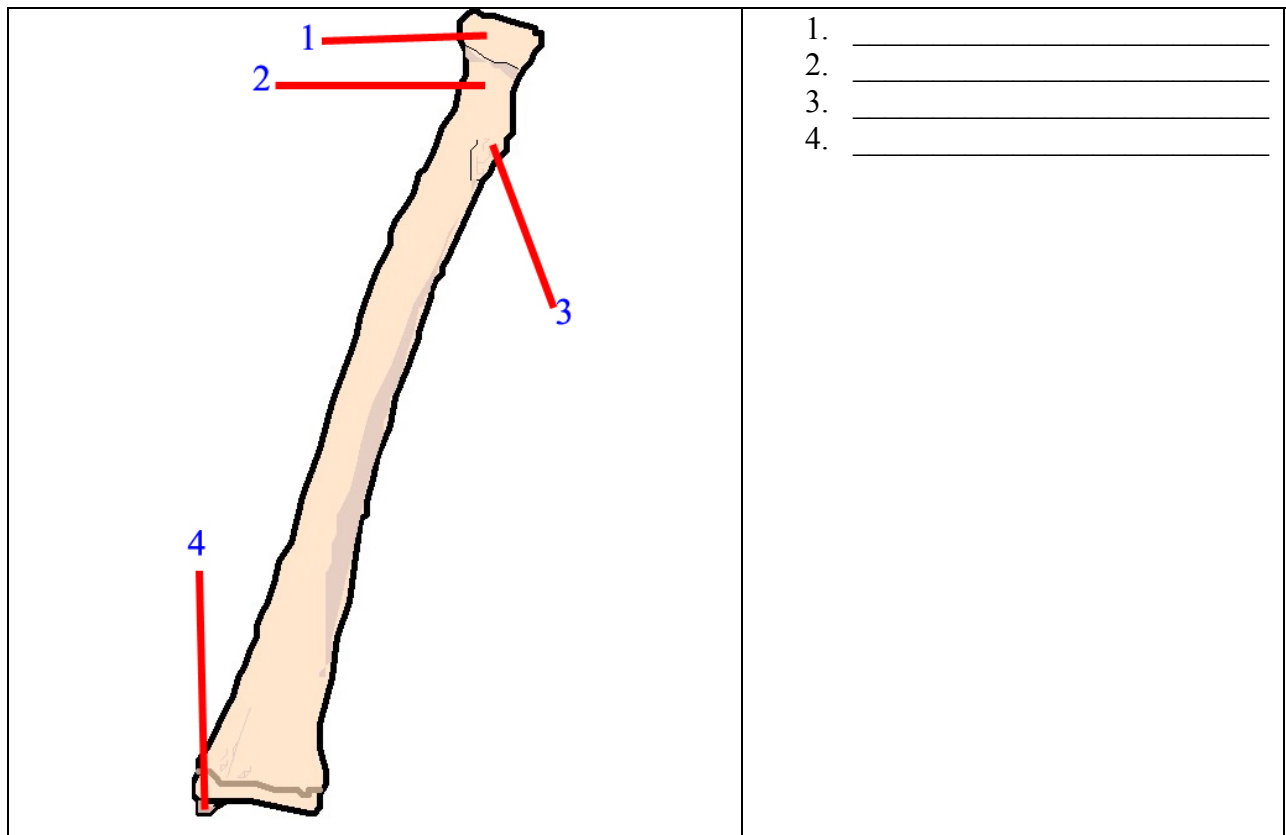


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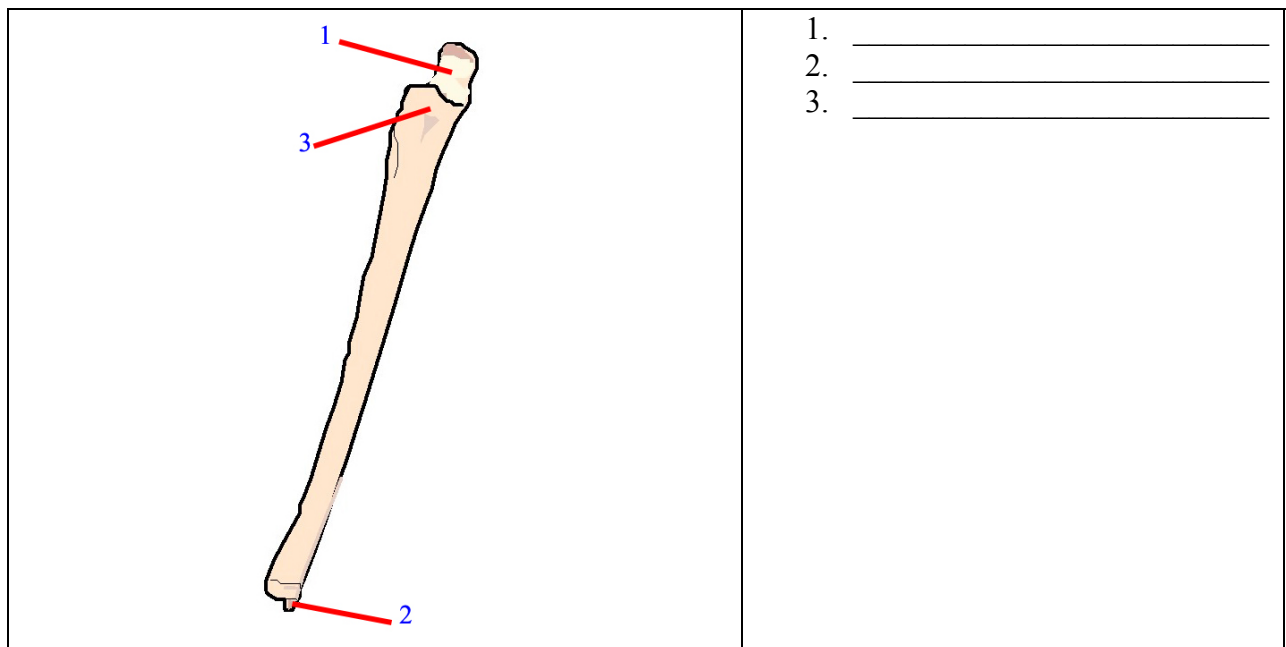


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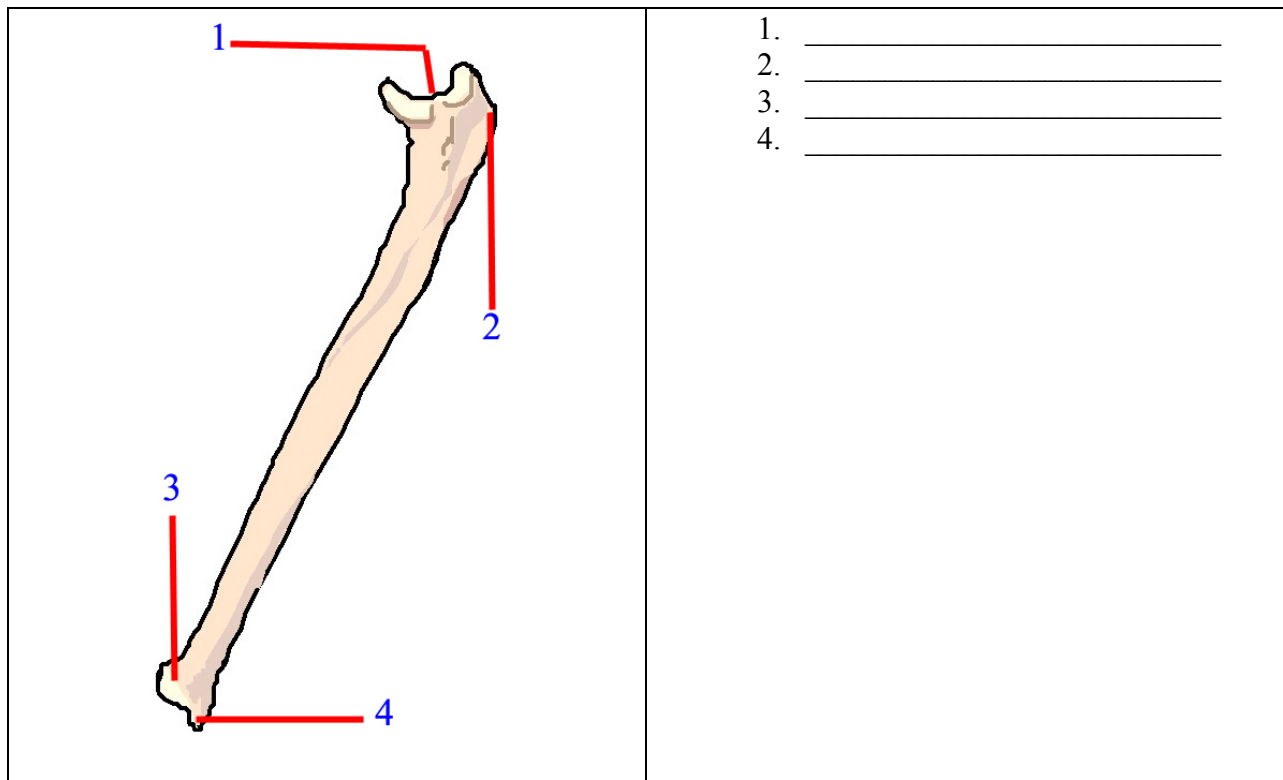




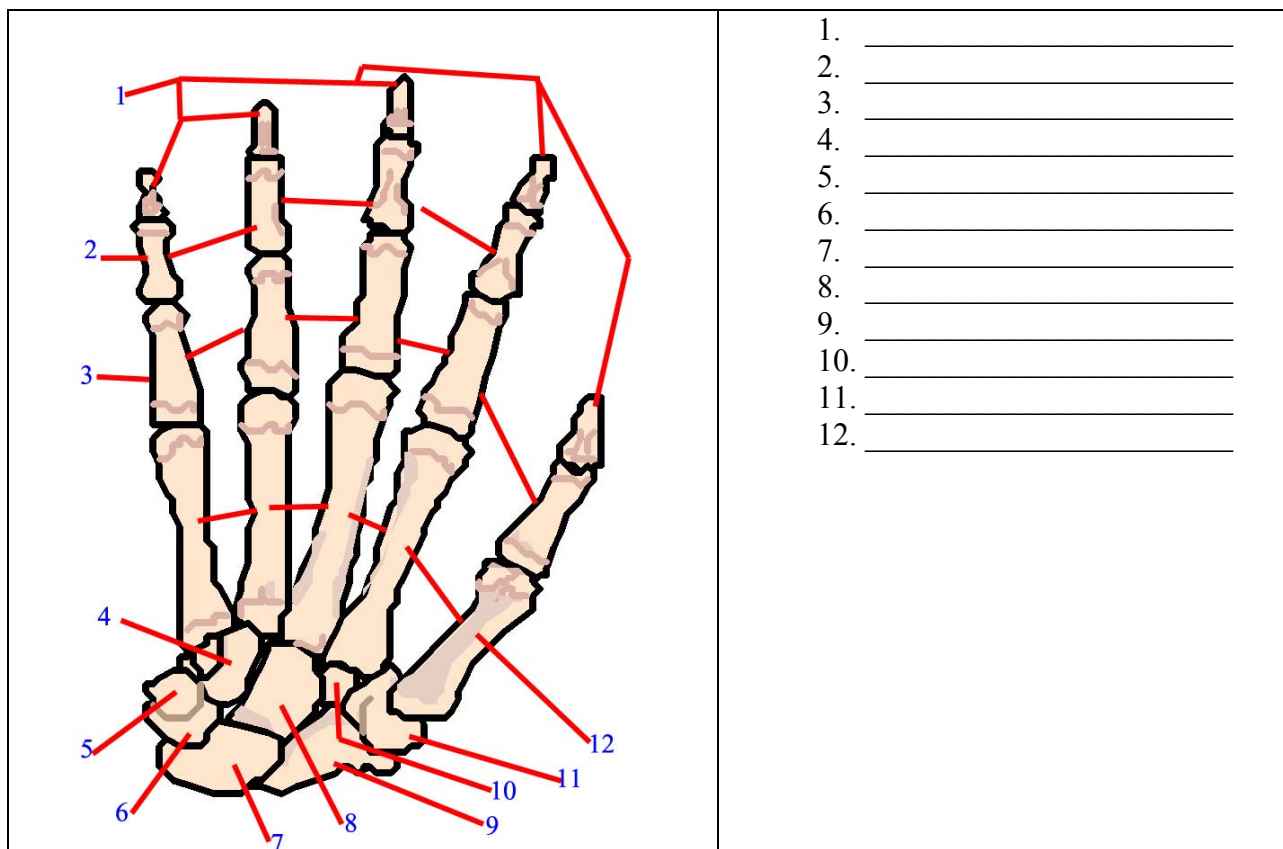
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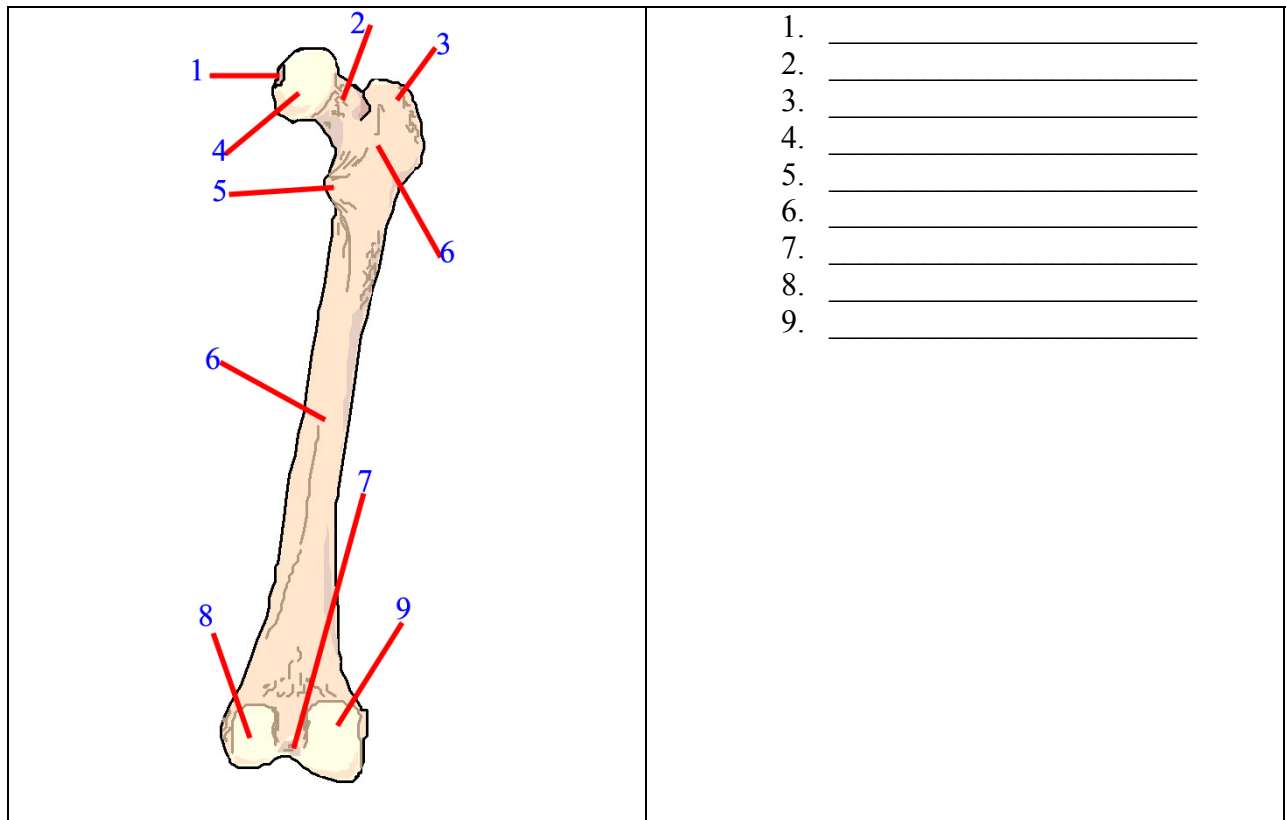
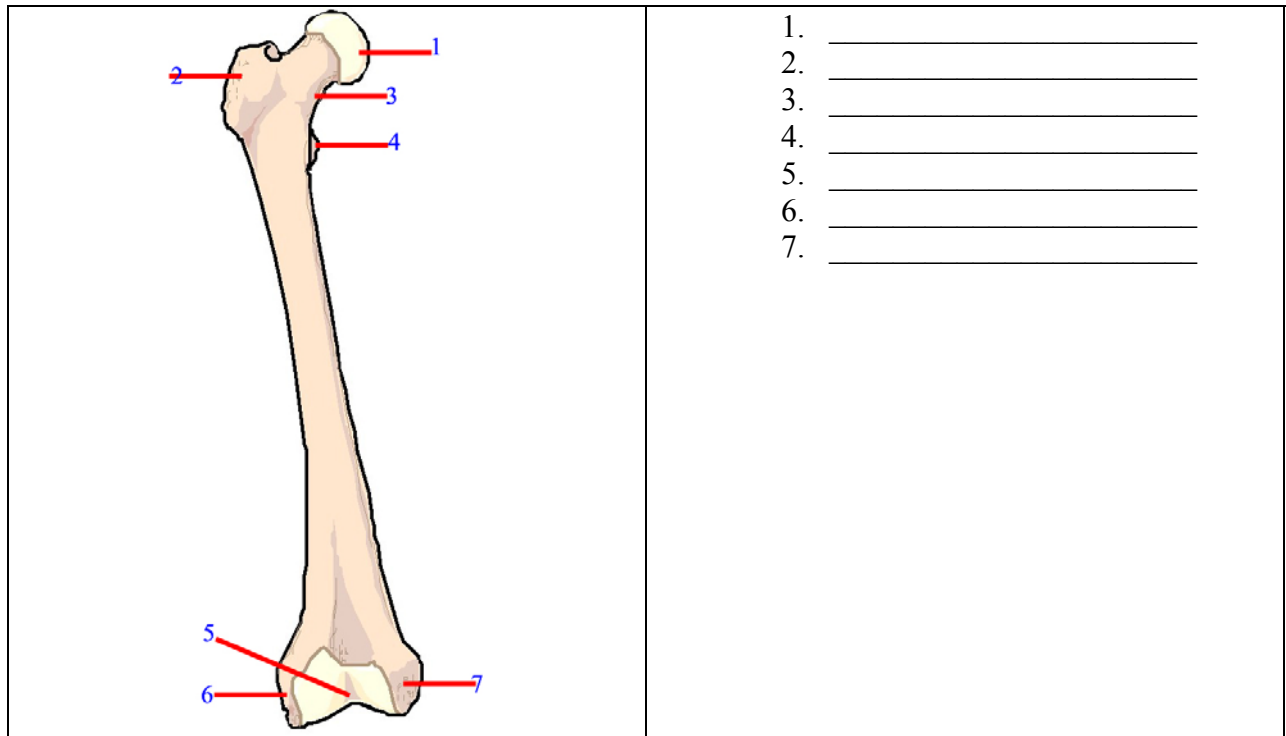


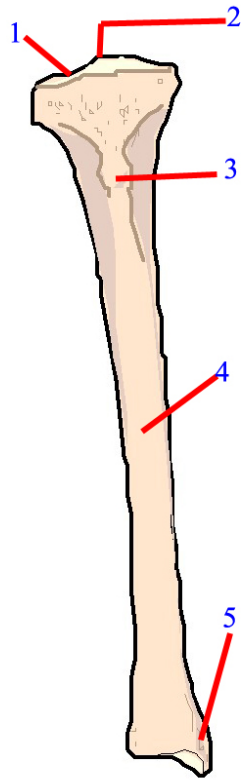
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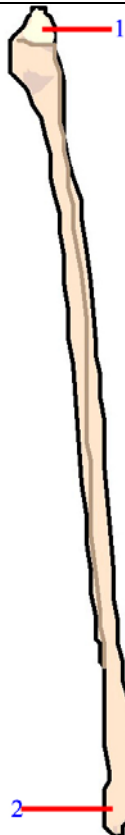
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