

Lab 6
Pelvis and Leg

Exercises to Complete:

1. How did the shift to bipedal walking affect the human body? Did it just affect the legs?
2. The pubic symphysis is a special kind of joint that holds the two halves of the pelvis together anteriorly. Describe what the surface of the pubic symphysis looks like. Based on your knowledge of joints and joint disease so far, what do you think the pubic symphysis can tell you about a person?
3. How many segments does a typical sacrum have? How many does your skeleton have?
4. Using a pair of calipers, measure the head of your L and R femora in millimeters. Based on this measurement, is your skeleton a male or a female? ($M > 45\text{mm}$, $F < 42\text{ mm}$) Do you agree? Why or why not?
5. *Critical Thinking.* You've learned ways that the bones of males and females differ throughout the semester. Looking at the pelvic girdle and knowing what you know about male and female anatomy, what kinds of differences might you expect between a male and a female pelvis?

Vocabulary Review:

1. The incomplete closure of the arches on a sacrum is known as _____.
2. The sacrum articulates with the ossa coxarum at the _____ joint.
3. The _____ is where L5 articulates with the sacrum.
4. An os coxae is made up of three parts: _____, _____, and _____.
5. The head of the femur articulates at the _____ of the os coxae.
6. The superior border of the os coxae, which provides attachment for some abdominal muscles, is known as the _____.
7. There are four iliac spines on the os coxae: _____, _____, _____, and _____.
8. The _____ notch separates the ilium from the ischium posteriorly.

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9. The _____ is actually a feature of the ischium that is colloquially referred to as your “butt bone.”
10. The two halves of the pelvis articulate anteriorly at a special joint called the _____.
11. The two halves of the pelvis articulate posteriorly at the _____, an ear-shaped articular surface.
12. The femur has _____ trochanters proximally and _____ condyles and _____ epicondyles distally.
13. Not a pathology, the _____ anchors a ligament that helps keep the head of the femur in the acetabulum of the os coxae.
14. Males tend to have a longer, rougher _____ than females because it is a site for many adductor muscles of the hip.
15. The patella is the largest _____ bone in the body, as it forms in a tendon.
16. The _____ of the tibia forms the _____ part of your ankle, while the _____ of the fibula forms the _____ part.
17. Part of the quadriceps attaches at the _____ on the antero-proximal aspect of the tibia.
18. The shin is more correctly known as the _____.
19. The tibia and fibula both have _____, where a fibrous membrane attaches the two bones together.
20. The distal end of the tibia articulates with the _____.