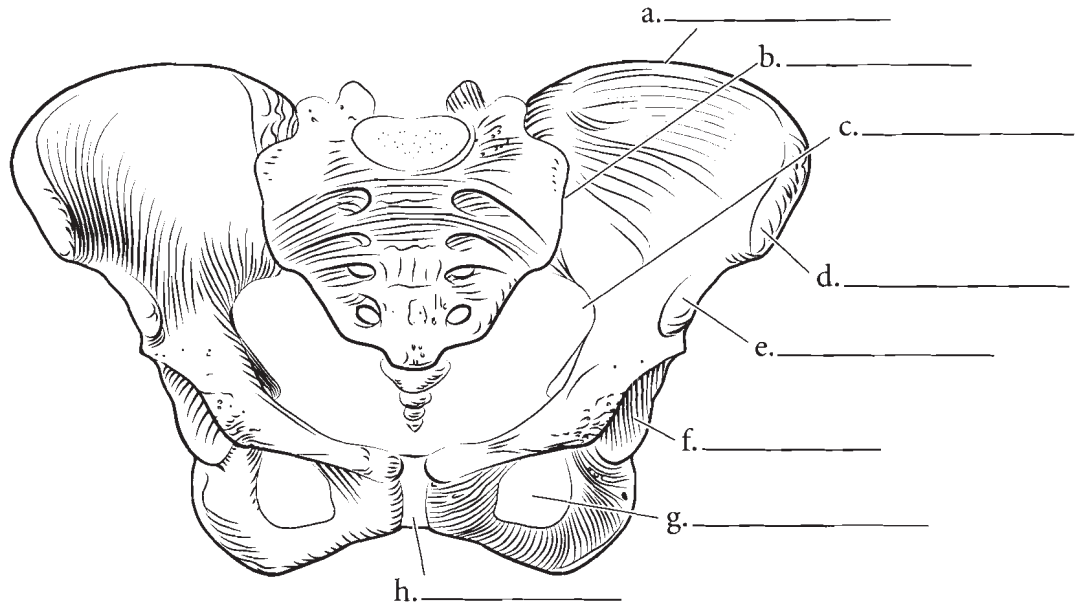
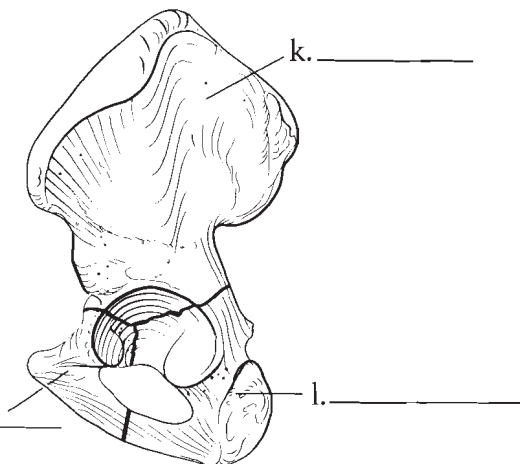
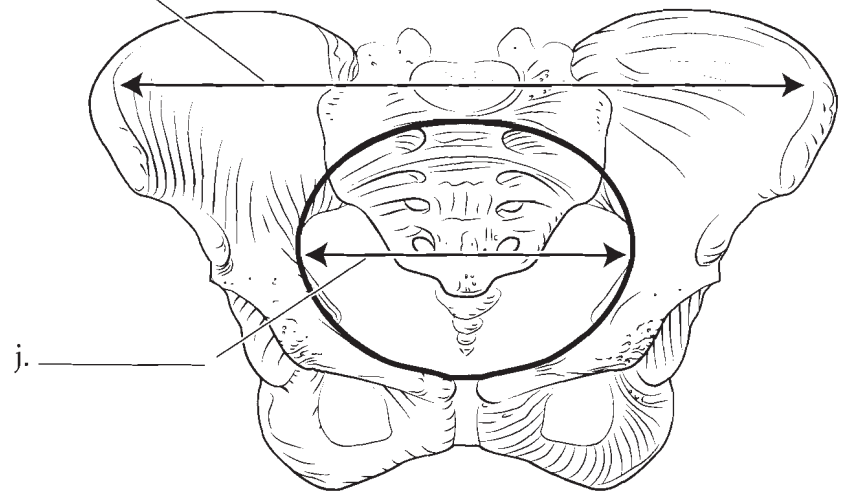


## HIP

The hip bones are known as the os coxae. Each os coxa is a result of the fusion of three bones, the **ilium**, the **ischium**, and the **pubis**. Label and color in these three fused bones using a different color for each area. The two os coxae, when joined together by the **pubic symphysis**, form the pelvis and it can be divided into an upper **false pelvis** and a lower **true pelvis** separated by the pelvic brim. The **anterior superior iliac spine** and the **anterior inferior iliac spine** can be seen from the front. The top ridge of the pelvis is the **iliac crest**. The large, inferior hole is the **obturator foramen** and the depression superior to it is the **acetabulum**. Note the junction of the sacrum and the ilium that forms the **sacroiliac joint**. Label the features of the anterior view and color them in.



i. \_\_\_\_\_

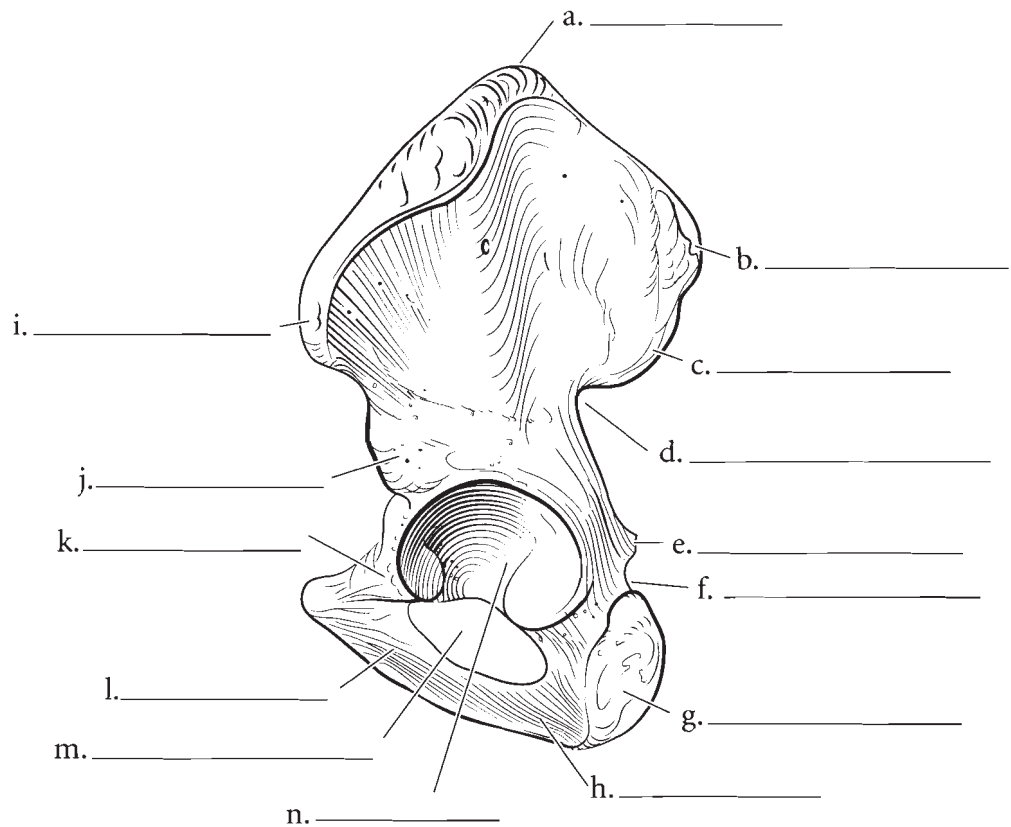


**Answer Key:** a. Iliac crest, b. Sacroiliac joint, c. Greater sciatic notch, d. Anterior superior iliac spine, e. Anterior inferior iliac spine, f. Acetabulum, g. Obturator foramen, h. Pubic symphysis, i. False pelvis, j. True pelvis, k. Ilium, l. Ischium, m. Pubis

## HIP (CONTINUED)

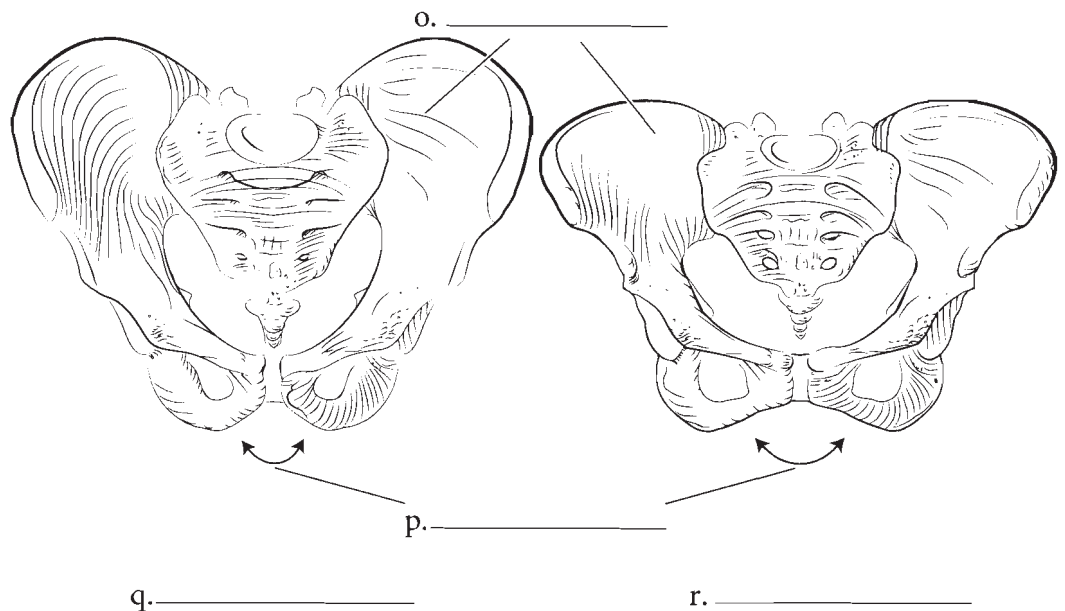
### Lateral View

When seen from a lateral view, several features are apparent in the os coxa. Locate the **posterior superior iliac spine** and the **posterior inferior iliac spine** along with the **greater sciatic notch**, the **spine of the ischium**, and the **lesser sciatic notch**. The **ischial tuberosity** is at the posterior, inferior edge of the ischium. Just anterior to the tuberosity is a strip of bone called the **ischial ramus** that attaches to the **inferior pubic ramus**. The body of the pubis is the most anterior part of the pubis and the **superior pubic ramus** is the portion that forms part of the acetabulum. Label and color these features on the illustration.



## MALE AND FEMALE PELVIS

Differences can be seen between the male and female pelvis. The **subpubic angle** in males is less than 90 degrees and the female angle is greater than 90 degrees. The ilium in males is more vertical than in a pelvis of a woman who has had children. A further distinction is seen in the side view of a pelvis in which the sciatic notch in the female pelvis has a much wider angle than in males. Color in the upper portion of the ilium.

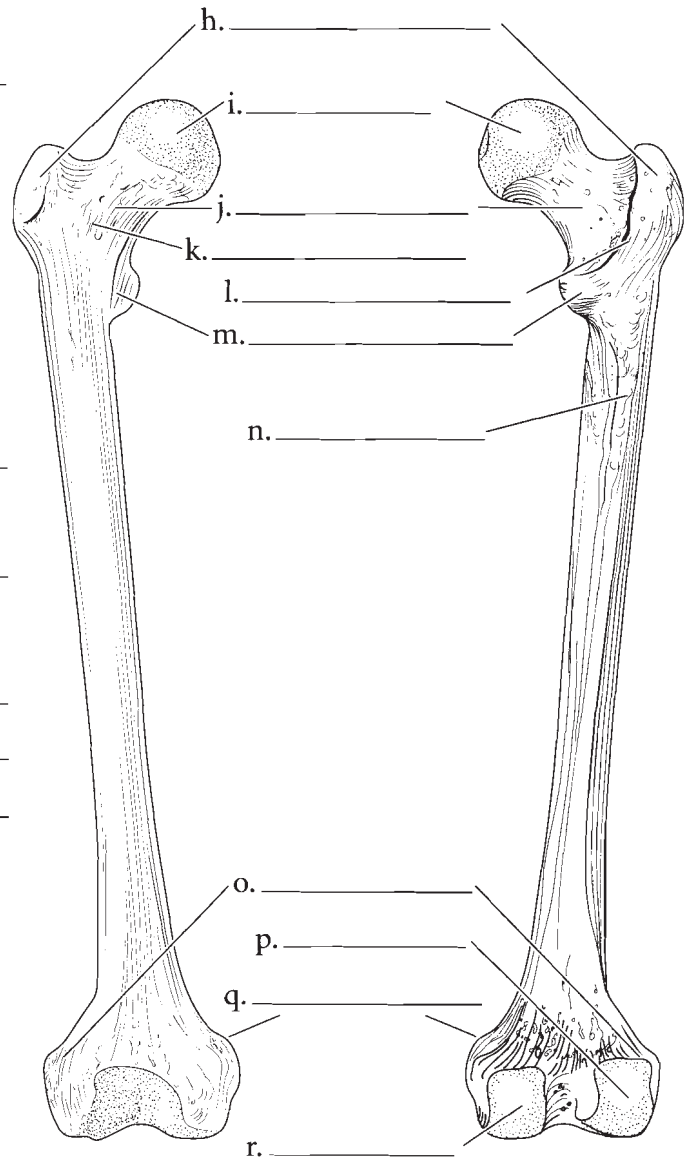
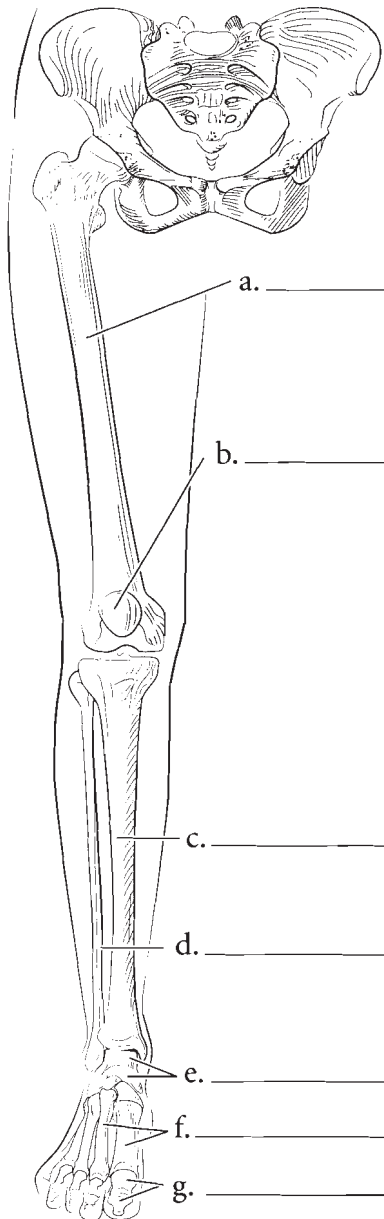


**Answer Key:** a. Iliac crest, b. Posterior superior iliac spine, c. Posterior inferior iliac spine, d. Greater sciatic notch, e. Spine of the ischium, f. Lesser sciatic notch, g. Ischial tuberosity, h. Ischial ramus, i. Anterior superior iliac spine, j. Anterior inferior iliac spine, k. Superior pubic ramus, l. Inferior pubic ramus, m. Obturator foramen, n. Acetabulum, o. Iliac blade, p. Subpubic angle, q. Male (less than ninety degrees), r. Female (more than ninety degrees)

## LOWER EXTREMITY— FEMUR/PATELLA

The lower extremity consists of the **femur** of the thigh, the **tibia** and **fibula** of the leg, and the **tarsals**, **metatarsals**, and **phalanges** of the foot. Locate these major regions of the lower extremity and label them on the diagram. Color these areas in different colors on the illustration.

The femur seen from the anterior view shows a proximal **head** and a constricted **neck**. Two large processes are distal to the neck. These are the **greater trochanter** and the **lesser trochanter**. There is a raised section of bone between them called the **intertrochanteric line**. The main part of the bone is the shaft and the **lateral epicondyle** and **medial epicondyle** are the distal expansions of the bone. The posterior view of the femur has additional features such as the **intertrochanteric ridge**, the **linea aspera**, and the **lateral condyle** and the **medial condyle**. The femur is bowed and this can be seen from a lateral view as well as the placement of the **patella**. The **base** of the patella is superior and the **apex** is inferior. Label the features of the femur and patella and color in the various parts.



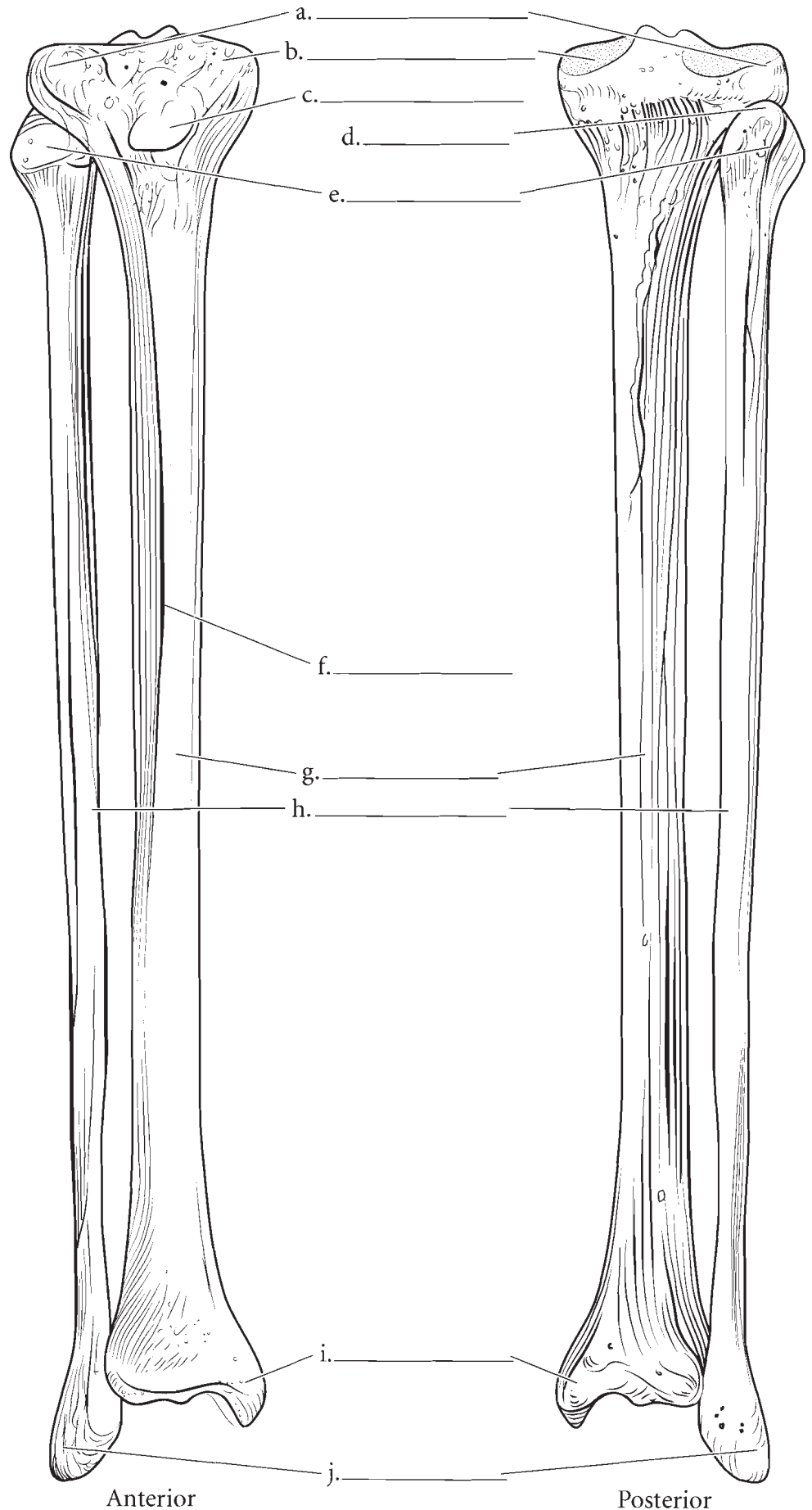
Anterior

Posterior

**Answer Key:** a. Femur, b. Patella, c. Tibia, d. Fibula, e. Tarsals, f. Metatarsals, g. Phalanges, h. Greater trochanter, i. Head, j. Neck, k. Intertrochanteric line, l. Intertrochanteric ridge, m. Lesser trochanter, n. Linea aspera, o. Lateral epicondyle, p. Lateral condyle, q. Medial epicondyle, r. Medial condyle, s. Base of patella, t. Apex of patella

## TIBIA / FIBULA

The **tibia** supports the weight of the body and is the bone that articulates with the femur. The **fibula** is more slender and is a bone to which muscles attach. The top of the tibia is expanded into a triangular shape with the **medial tibial condyle** and **lateral tibial condyle** articulating with the condyles of the femur. The quadriceps femoris muscles attach to the **tibial tuberosity** on the anterior surface of the tibia just below the condyles. The **anterior tibial crest** is a large ridge that runs the length of the bone. At the terminal portion of the tibia is the **medial malleolus**. This process, along with the **lateral malleolus** of the fibula, join with the talus of the foot. The **head** of the fibula is proximal. It is a triangular region with a pointed **apex**. Label the tibia and fibula illustrations and color in the various regions of the bones.

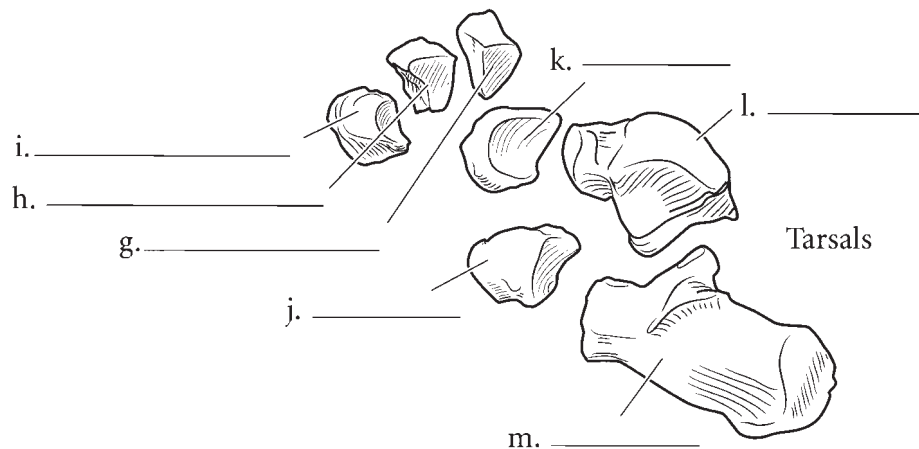
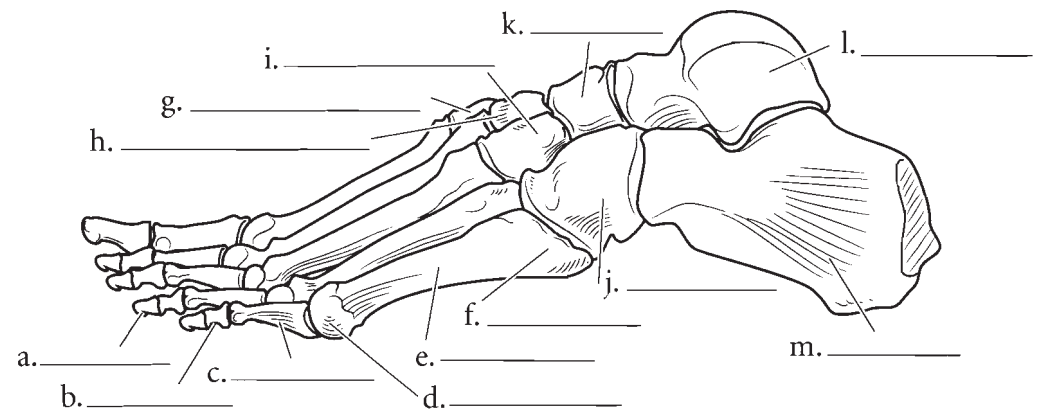
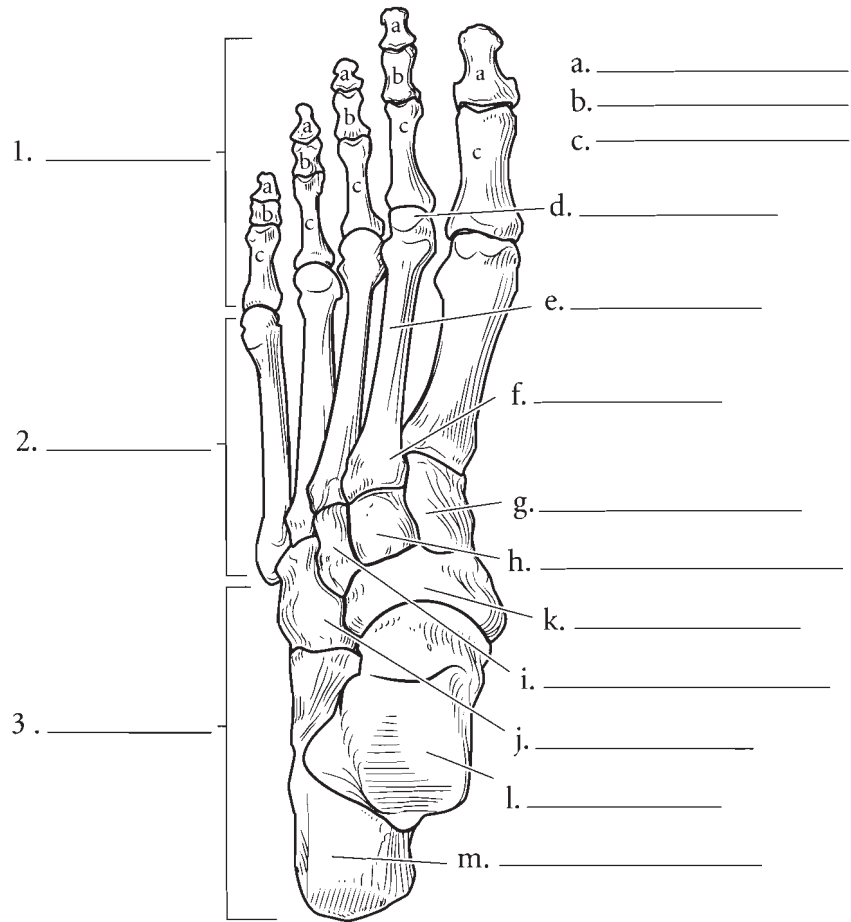


**Answer Key:** a. Lateral tibial condyle, b. Medial tibial condyle, c. Tibial tuberosity, d. Apex, e. Head of fibula, f. Anterior tibial crest, g. Shaft of tibia, h. Shaft of fibula, i. Medial malleolus, j. Lateral malleolus

### LEFT FOOT

Color in the seven **tarsal** bones using different colors for each bone. The **calcaneus** is the heel bone and takes the major weight of the body during walking. The **talus** connects the foot to the tibia and fibula forming the ankle joint. The **cuneiforms** are so called because they are wedge-shaped bones and they form a natural arch of bone in the foot.

Note that each of the **metatarsals** and each of the **phalanges** has a distal head, a shaft, and a proximal base. Color all of the five metatarsals the same color. The first metatarsal is under the big toe and the fifth is under the smallest toe. Color all of the fourteen phalanges another color. All of the proximal phalanges are given the same letter in the illustration as are the middle and distal phalanges. Write **proximal**, **middle**, or **distal** in the appropriate space next to the toes. The big toe (hallux) has two phalanges while the other toes have three.



**Answer Key:**

- 1. Phalanges
- 2. Metatarsals
- 3. Tarsals
- a. Distal phalanges,
- b. Middle phalanges, c. Proximal phalanges, d. Head, e. Shaft, f. Base,
- g. First (medial) cuneiform, h. Second (intermediate) cuneiform,
- i. Third (lateral) cuneiform, j. Cuboid,
- k. Navicular, l. Talus, m. Calcaneus