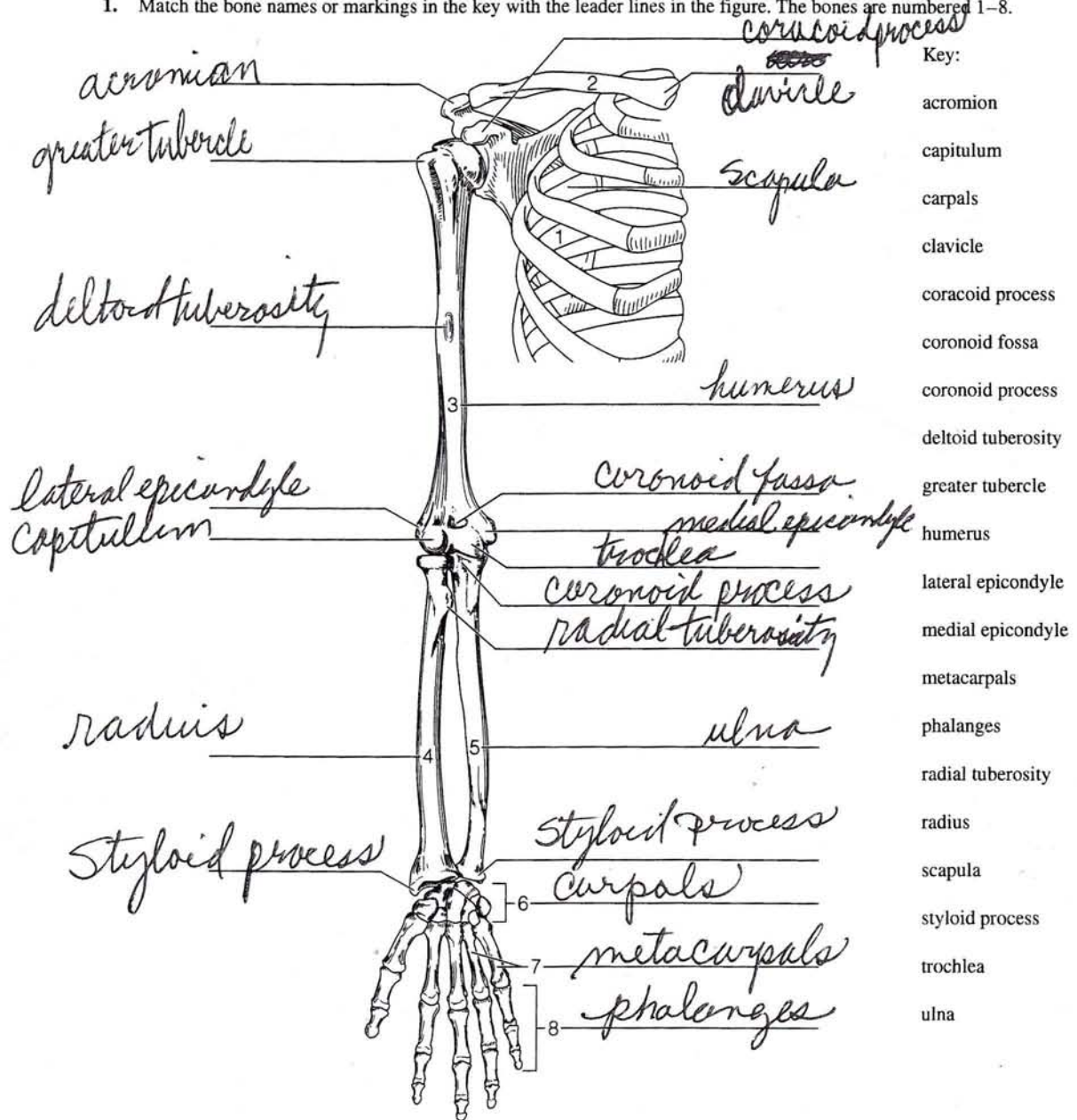


The Appendicular Skeleton

Bones of the Pectoral Girdle and Upper Limb

1. Match the bone names or markings in the key with the leader lines in the figure. The bones are numbered 1-8.



Review Sheet

- Why is the clavicle at risk to fracture when a person falls on his or her shoulder? It is a slender lightweight bone that withstands trauma poorly
- Why is there generally no problem in the arm clearing the widest dimension of the thoracic cage? The clavicle acts as a strut to hold the glenoid cavity of the scapula laterally away from the narrowest dimension of the rib cage
- What is the total number of phalanges in the hand? 14
- What is the total number of carpals in the wrist? 8

Bones of the Pelvic Girdle and Lower Limb

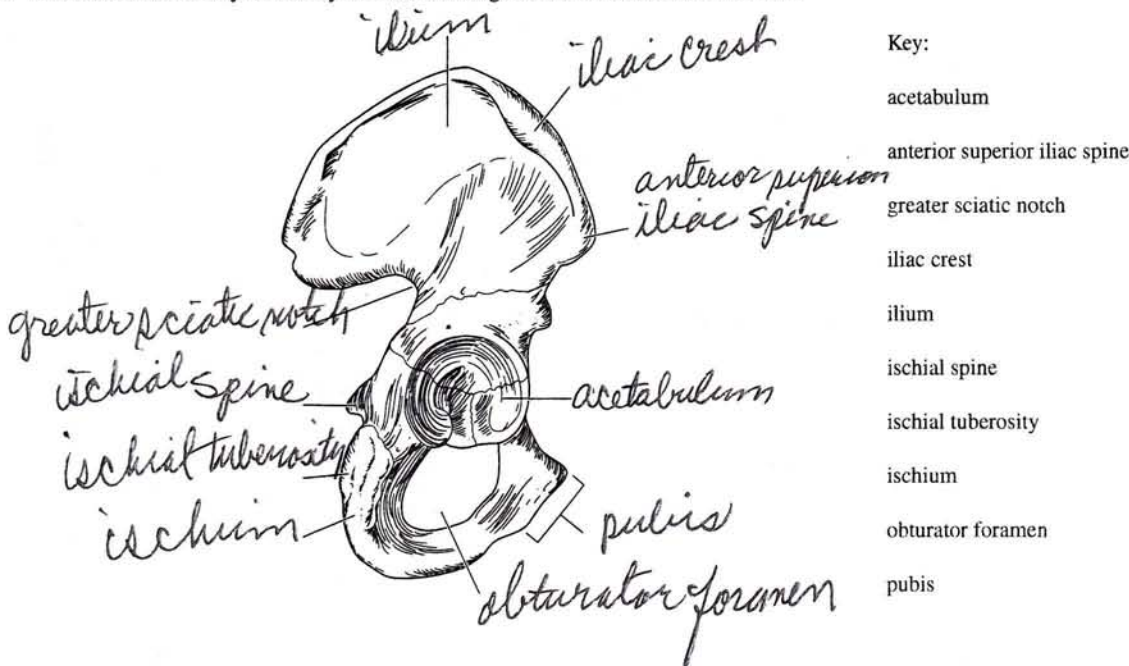
- Compare the pectoral and pelvic girdles in terms of flexibility (range of motion) allowed, security, and ability to bear weight.

Flexibility: pectoral girdle most flexible and light weight
 Security: pelvic girdle most secure apical and limb attachments
 Weight-bearing ability: pelvic girdle most because of massive structure

- What organs are protected, at least in part, by the pelvic girdle? uterus, bladder, small intestine, rectum

- Distinguish between the true pelvis and the false pelvis. The true pelvis is the region inferior to the pelvic brim which is encircled by bone. The false pelvis is the area medial to the flaring iliac bones and lies superior to the pelvic brim

- Use terms from the key to identify the bone markings on this illustration of an os coxa.



Review Sheet

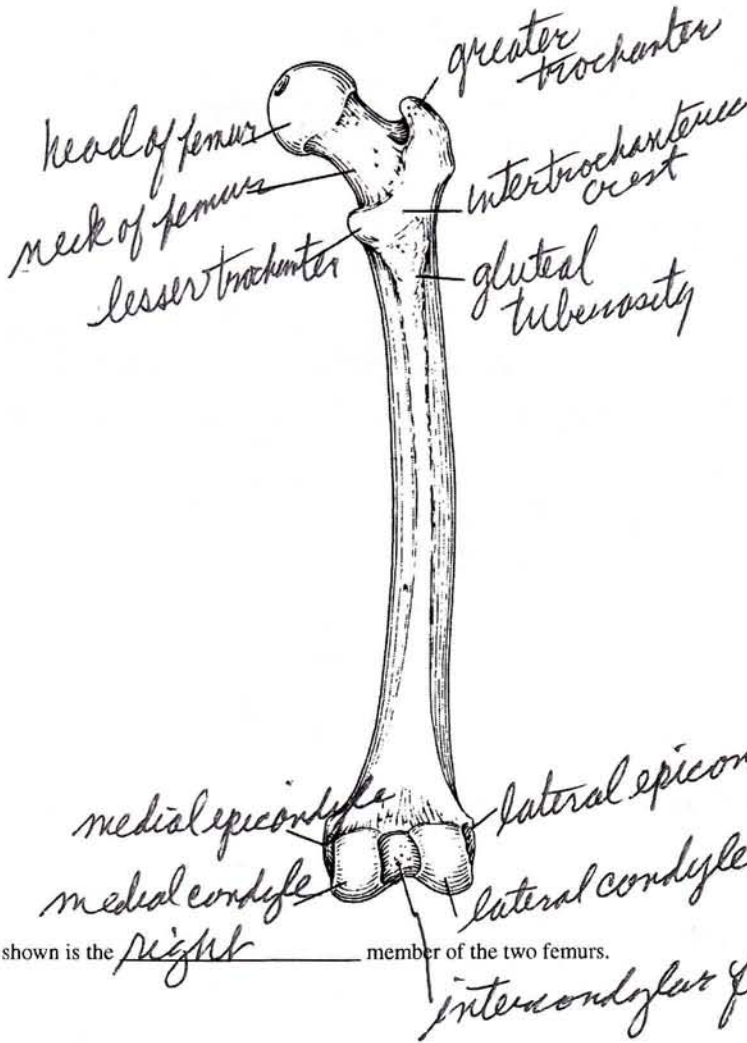
5. The pelvic bones of a four-legged animal such as the cat or pig are much less massive than those of the human. Make an educated guess as to why this is so.

The pelvic girdle does not have to carry the entire weight of the trunk in the quadruped animal

6. A person instinctively curls over the abdominal area in times of danger. Why? *abdominal area*
organs receive the least protection from the skeletal system

7. What does *fallen arches* mean? *A weakening of the tendons and ligaments supporting the arches of the foot*

8. Match the terms in the key with the appropriate leader lines on the diagram of the femur. Also decide if this bone is a right or left bone.



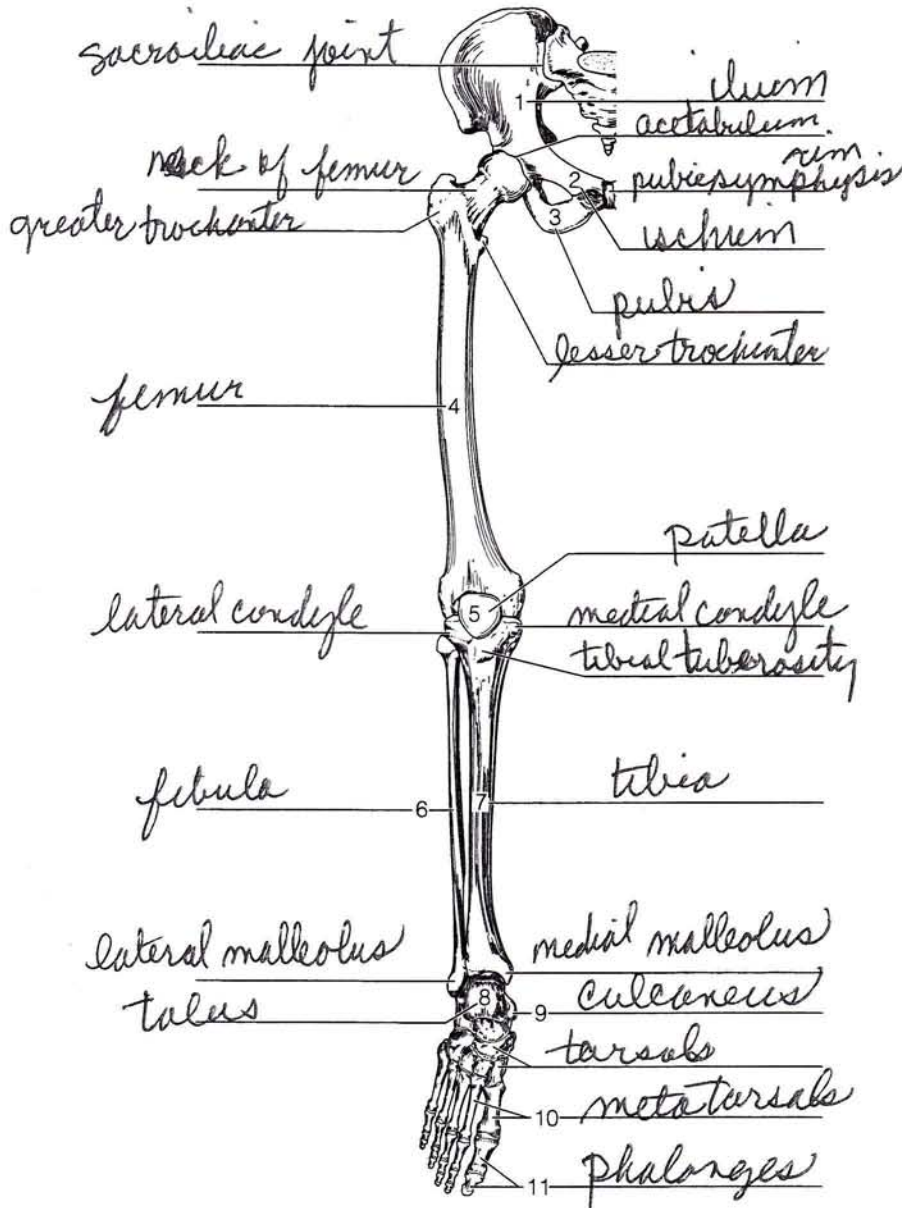
Key:

- gluteal tuberosity
- greater trochanter
- head of femur
- intercondylar fossa
- intertrochanteric crest
- lateral condyle
- lateral epicondyle
- lesser trochanter
- medial condyle
- medial epicondyle
- neck of femur

The femur shown is the *right* member of the two femurs.

Review Sheet

9. Match the bone names and markings in the key with the leader lines in the figure. The bones are numbered 1-11.



Key:

acetabulum (rim)

calcaneus

femur

fibula

greater trochanter

ilium

ischium

lateral condyle

lateral malleolus

lesser trochanter

medial condyle

medial malleolus

metatarsals

neck

patella

phalanges

pubic symphysis

pubis

sacroiliac joint

talus

tarsals

tibia

tibial tuberosity