

ANT 3514 – Introduction to Biological Anthropology
Primate Morphology
Lab 4, Week of 9/15/03

Station 1: Dentition

Write down the dental formula for each primate dentition.

A.

B.

C.

D.

Homework: Which is the New World monkey and why? What other dental characteristics, reviewed in class, differ between New World and Old World monkeys? List a few other differences between New World and Old World monkeys.

Station 2: Identification

Using what you know about primate classification, which of the following are ...

Platyrrhine primates: _____

Strepsirrhine Primates: _____

Justify your identification with a morphological character or two.

Station 3: Locomotion

Name two morphological characteristics unique to each of these modes of locomotion:

Leaper

1. _____

2. _____

Station 3: Locomotion con't

Arboreal Quadruped

1. _____

2. _____

Suspensory Primate

1. _____

2. _____

Station 4: Crania

These are skulls of a chimpanzee, a human, a baboon and a tree shrew. Describe two differences between:

Chimp and human 1. _____ 2. _____

Baboon and chimp 1. _____ 2. _____

Baboon and tree shrew 1. _____ 2. _____

Station 5: Sexual Dimorphism

Gorillas exhibit a strong degree of sexual dimorphism in morphology. Male gorillas have a **sagittal crest**, a ridge of bone running along the superior portion of the skull which anchors the jaw muscles. Which of these skulls belongs to a female gorilla? What tooth in the dentition is dramatically different? In terms of gorilla social behavior, what might account for these differences?

Station 6: Skeletons

Here are skeletons of a human, a macaque, a chimpanzee, and a dog. Using what you learned about human osteology in Lab 2, describe the differences you see in the skeletal regions listed below. How does morphology reflect function (e.g., locomotion)?

Vertebral Column & Thorax:

Os coxa:

Lower limb: