

Name _____ Key _____

Lab: Mon p.m.

Wed a.m.

Wed p.m.

Generally, you will have plenty of time to answer questions at each station. The key thing is to read a question completely, and to answer with the appropriate level of detail. Answering with “cranium” when a specific bone is pointed to would not be the appropriate level of detail, for example. The lab handouts should be the base resource, and you can also use the Martin et al. laboratory manual as an additional resource. Everything I ask will be in the lab handout as discussed in lab.

Species names are included in the key to being to familiarize you with them. You are not responsible in this lab exam for identifying species.

1	Name the bone with the letter A <u>Rangifer skull, frontal bone</u> Name the bone with the letter B <u>Rangifer skull, zygomatic process of the squamosal bone or jugal bone, the band shifted over time. For this question, depending on the wording could also put zygomatic arch. If you are in doubt, you can put both zygomatic arch and zygomatic process of the squamosal in a case like this. On the exam there would never be a case where you could put 2 unique bones though</u>
2	What stance does this specimen have? Why? <u>Lizard skeleton, plantigrade stance, carpals/tarsals and metacarpals/metatarsals all on ground.</u>
3	Name the bone with the letter A (Rubber band) <u>Sloth (Megalonychidae), radius</u> Name the bone with the letter B (flagging) <u>Sloth (Megalonychidae), Ulna</u>
4	What structure is the flagging/string attached to? <u>Odocoileus skull, pedicel of antler.</u>
5	Name the bone with the letter A <u>Bos taurus skull, horncore</u> Name the bone/structure with the letter B <u>Bos taurus skull, nasal bone</u>
6	Name the bone/structure with the letter A <u>Amadillo (Edentata) skeleton, dermal bone</u> Name the bone with the letter B <u>Amadillo (Edentata) skeleton, fibula</u>
7	What type of tooth is pointed to? <u>Vulpes vulpes skull, premolar, which you could distinguish by identifying the carnassial pair. Tooth formula is an alternative way to identify, but since the look-up table was not provided this is an indication it was not needed.</u>
8	What type of hair is pointed to? <u>Glaucomys volans skin, vibrissae</u>
9	Name the bone with the letter A (rubber band) <u>Primates skeleton, radius</u> Name the bone with letter B (paper clip) <u>Primates skeleton, ilium or innominate bones</u>

10	<p>What is at the letter A? <u>Procyon lotor skin, guard hair</u></p> <p>What is at the letter B? <u>Procyon lotor skin, underfur</u></p>
11	<p>Given what you see of this specimen, what stance would it likely have? Why?</p> <p><u>Geomys bursarius skin, Plantigrade (claws), short legs, not cursorial so not digitigrade.</u></p>
12	<p>What type of cheekteeth does this specimen have? What food likely consumed?</p> <p><u>Clethrionomys gapperi skull, hypsodont cheekteeth, vegetation.</u></p>
13	<p>How would you characterize the coloration pattern of the hair on this specimen?</p> <p><u>Marmota monax skin, agouti pattern. Could also work in something regarding the camouflauge / concealment function as I discussed with some of you.</u></p>
14	<p>What bone is this? <u>Alces alces skull, dentary bone or mandible</u></p>
15	<p>What bone/structure is this? <u>Equus caballus skull, post-orbital bar</u></p>
16	<p>Are the teeth in this skull primitive or derived relative to other mammals? Why?</p> <p><u>Didelphis virginianus skull, primitive (generalized shape, not specialized for any food). Contrast it with teeth of a horse or deer, for example, which would have a more derived dentition. Key to this question is the clause relative to other mammals, as opposed to relative to a reptile.</u></p>
17	<p>What type of teeth? Why? What is the likely food consumed? <u>Dolphin skull, homodont teeth, likely consumes a food which needs to be grabbed and held. i.e., teeth are not type that would be used on vegetation, nor does the jaw size and shape indicate a food that is easily obtained.</u></p>
18	<p>Name the bone with the letter A (yellow flagging) <u>Bos taurus leg, scapula</u></p> <p>Name the bone/structure with the letter B (blue flagging) <u>Bos taurus leg, fused radius and ulna (this is young specimen and not quite fused)</u></p>
19	<p>What is pointed to? What stance would this specimen have?</p> <p><u>Equus caballaus phalanges is pointed to, unguligrade would be stance</u></p>
20	<p>Name the bone with the letter A <u>Martes pennanti parietal bone.</u></p> <p>Name the bone/structure with the letter B <u>Martes pennanti saggital crest</u></p>
21	<p>If this specimen is from Felidae, what type of tooth is pointed to?</p> <p><u>Lynx rufus skull, molar or peg molar. You could answer this by looking at the tooth formula look-up table and seeing the number of molars and premolars in the upper tooth rows.</u></p>