Peer-graded Assignment:
Species and Their Biological Groups

<u>(i)</u>

It looks like this is your first peer-graded assignment. Learn more

Review fellow learners

Congrats on submitting your assignment! Your peers can now review it and give you constructive feedback. You can do your part and help other learners complete this course by giving reviews.

Review assignments

Instructions

My submission

Discussions

Jungle Crow, Xenoceratops and Malayan gharial

Submitted on April 8, 2024

PROMPT

Think about the different species that you have interacted with recently. This can be pets, animals you've seen at the zoo or in a park, plants in a garden, food items that you have eaten, etc. Pick the **first** interesting organism that you have encountered recently. Identify three larger biological groups that the species belongs to (e.g. plants, animals, fungi, molluscs, insects, arthropods, vertebrates, trees, grasses, mammals, reptiles, birds, genus, etc.) and the unifying traits for each of these groups.

Jungle Crow (Corvus macrorhynchos)

· Aves:

Loss of teeth, eduction in number of trunk vertebrae, flexible furcula, strut-like coracoid, alula, carpometacarpus, fully folding wings, possessing pygostyle, further reduction in number of trunk vertebrae, loss of gastralia, reorientation of pubis to lie parallel to iliumand ischium, reduction of number of trunk vertebrae, decrease in size of acetabulum, patellar groove on femur.

· Theropoda:

Knife-like teeth (thin, recurved, serrated; termed ziphodont), promaxillary fenestra on maxilla (an extra opening in front of the antorbital opening), large hands with advanced grasping ability.

· Saurischia:

Elongate cervical vertebrae, fossa expanded into the anterior corner of the external naris, lacrimal expanded over the rear part of antorbital fenestra, a concave facet for the atlas on the axial intercentrum, elongation of the centra of anterior cervical vertebrae, distinctly large hand, loss of distal carpal V, twisting of the first phalanx of manual digit I, metatarsals overlapping.



PROMPT

Pick a **second** interesting organism that you have encountered recently. Identify three larger biological groups that the species belongs to (e.g. plants, animals, fungi, molluscs, insects, arthropods, vertebrates, trees, grasses, mammals, reptiles, birds, genus, etc.) and the unifying traits for each of these groups.

Xenoceratops foremostensis

Ceratopsia

Rostral bone, a high external naris separated from the ventral border of the premaxilla by a flat area, enlarged premaxilla, well-developed lateral flaring of the jugal.

Ornithischia

Opisthopubic pelvis, predentary bone, toothless and roughened tip of snout, reduced antorbital opening, palpebral bone, jaw joint set below level of the upper tooth row, cheek teeth with low subtriangular crowns, at least five sacral vertebrae, ossified tendons above the sacral region, small prepubic process along the pubis, long and thin preacetabular process on the ilium.

Dinosauria

Perforate acetabulum, elongate deltopectoral crest on humerus; tibia with transversely expanded subrectangular distal end.



PROMPT

Pick a **third** interesting organism that you have encountered recently. Identify three larger biological groups that the species belongs to (e.g. plants, animals, fungi, molluscs, insects, arthropods, vertebrates, trees, grasses, mammals, reptiles, birds, genus, etc.) and the unifying traits for each of these groups.

Malayan gharial (Tomistoma schlegelii)

Archosauria

Antorbital fenestra, loss of teeth on palate, and new shape of articulating surface of ankle (calcaneum).

Tetrapoda

Skeletal features relating to mobility on land – in particular, four limbs with stable (unchanging) element patterns.

Vertebrata

Bone organized into elements, neural crest cells, the differentiation of the cranial nerves, the development of eyes, the presence of kidneys, new hormonal systems, and mouthparts.



Start new attempt

Comments

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