

# COMPARATIVE VERTEBRATE ANATOMY      SPRING 2009

## REVIEW FOR CHAPTER 8

1. **Be able to define:** the bones and regions that comprise the axial skeleton, vertebral regionalization, the structures that make up a vertebral segment, be able to explain the concept of arcualia, which organisms have which kind of vertebral columns, evolutionary patterns of vertebral loss, fusion and retention in different vertebrate groups from anamniotes to amniotes, the concepts behind streamlining of body form, the support afforded by different types of bridges and how those apply to vertebrates.

2. **Relevant terms that you need to be able to define and use correctly include:** notochord, vertebral column, neural and interneural arches, hemal and interhemal arches, centrum, intercentrum, pleurocentrum, trunk, caudal, sacral, postsacral, thoracic, lumbar region vertebrae, vertebral body, aspondyly, monospondyly, aspidospondyly, diplospondyly, polyspondyly, rhacitinous, embolomeres, stereospondylous, holospondylous, lepospondylous, aceolous, amphicoelous, procoelous, opisthocoelous, heterocoelous vertebra, intervertebral disk, nucleus pulposus, apophyses, diapophyses, parapophyses, zygapophyses, transverse processes, pleurapophyses, myoseptum, dorsal rib, horizontal septum, capitulum and tuberculum of rib, facet, true, false and floating sternal ribs, uncinates, rib cage, sternal plate, procoracoid plate, xiphisternum, carina, manubrium, gastralia, plastron, carapace, somites, dermatome, sclerotomes, heterocercal, difycercal, homocercal, hypocercal tails, axis and atlas arches, proatlas, xiphisternum, innominate bone and neural spine.

Please note that this list is not necessarily complete and that other terms and concepts may be on the exam. These are the concepts and terms that come to mind for you to know as I am reviewing the text, laboratory manual and lectures notes.