

Review Sheet for Lecture #09: Life in the Early Paleozoic

Terms and Definitions: radiation, “inverted tree”, diversity, disparity, trilobite, cephalon, pygidium, thorax, thoracic segments, axial lobe, pleural lobe, holochroal and schizochroal compound eyes, endopodite, exopodite, biramous leg, enrolling behavior, coral septum, tabula, rugose coral symmetry, nautiloid septa, siphuncle, crinoid stem, cup, holdfast, pleurocolumnals, columnals,

Persons: none

Dates: none

Places: none

Organisms: trilobites, polymerid trilobites, agnostid trilobites, rugose corals, tabulate corals, brachiopods, four living cephalopod groups, nautiloidea, *Orthoceras*, *Haikouichthys*, *Pikaia*, *Amphioxus*

Review Questions:

Explain how the modern view of a “culled tree of life” is different from the traditional upwards-spreading cone of life

What is the difference between disparity and diversity?

Why do we infer that the legs and antennae of trilobites were not mineralized like the rest of their skeleton?

Summarize the disparity and diversity pattern of trilobites throughout the Paleozoic

What evidence exists that either trilobites or their predators already had a right/left preference?

What are the three different ways in which rugose corals are believed to have lived relative to the substrate?

Which is the only surviving subclass of crinoids today?