

History of the Earth - GLY 302

Lab Final Review Topics

Lab 6 - Stromatolites to Cnidaria

be able to recognize (identify)

stromatolites

foraminifera

sponges (e.g., *Astraespongia*)

cnidarians: solitary rugosan corals vs. colonial corals

know about

how stromatolites form

benthic vs. planktonic

the relative complexity (or lack thereof) of sponge and coral body

the symmetry found in corals

Lab 7 - Bryozoans, Brachiopods, Crinoids

be able to recognize (identify)

bryozoans

be able to tell branching bryozoans apart from branching corals

(corals have large hole, bryozoans have tiny holes)

brachiopods

stalked echinoderms (e.g., crinoids)

know about

the symmetries in brachiopods and echinoderms

the similar body complexity of bryozoans and brachiopods (lophophores)

Lab 8 - Echinoids, Mollusks, Trilobites

be able to recognize (identify)

echinoid echinoderms

pelecypods (mollusk bivalves)

gastropods (snails)

cephalopods (ammonites & belemnites)

trilobites

know about

symmetries in echinoids, pelecypods, gastropods, coiled cephalopods, trilobites

relative body/organ complexity of mollusks vs. brachiopods

Know

when the last trilobites become extinct

when the brachiopods, bryozoans, and crinoids become much less abundant

when the echinoids, pelecypods, and gastropods became much more abundant

when ammonites became extinct

Lab 9 - Introduction to Geologic Maps - Skills

geologic map symbols (e.g., formations, strike/dip, fold axes, plunging folds, etc.)
strike and dip
symmetric vs. asymmetric folds
horizontal vs. plunging fold axes
map pattern of anticlines and synclines (plunging and non-plunging)
map pattern of eroding (streams) flat-lying strata
construction of structural cross-section (profile)

Lab 10 - Geologic Structures of the Eastern U.S.

domes and basins in the stable interior
Appalachian compression: folding and thrust faulting
Pangea Rifting - extension: Newark rift basin

Lab 11 - Geologic Structures of the Western U.S.

Laramide compression: folding and thrust faulting
Basin and Range extension: normal faulting
San Andreas Fault motion
Columbia/Snake River volcanism