

Review Sheet for Lecture #08: Into the Phanerozoic

Terms and Definitions: form taxa

Persons: none

Dates:

Ediacaran Fauna: 575-543 million years

Small Shelly Fauna: 549-524 million years

Places:

Burgess Shale, Canada

Chengjiang Fauna, China

Sirius Passet Fauna, Greenland

Organisms: *Anomalocaris*, halkirids, *Wiwaxia*, *Opabinia*, *Pikaia*, *Hallucigenia*, *Haikouichthys*

Review Questions:

What is the significance and nature of the Ediacaran fauna and the Small Shelly Fauna?

What do paleontologists mean when they speak of “Darwin’s Dilemma”?

How did the discovery of the Burgess Shale revolutionize our view of Cambrian diversity?

Explain how three fossil species were finally recognized as just different parts of the same organism in the Burgess Shale

What significance does the 590 million year old Doushantuo fossils hold (embryos of what?)

Cambrian Explosion – how is this descriptor accurate and how is it misleading?