**GC B9 Conventional vs Short-Age Geology**

Script

Instructions: Advance the PowerPoint slides at every new paragraph and anywhere you see “/”

[1] A Comparison of conventional and short-age geology.

[2] This comparison is drawn from chapter 14 of the book Faith, Reason, and Earth History by Dr. Leonard Brand. / It will explore the assumptions, / interpretations, / and challenges of both conventional geology and short-age geology.

[3] The rock layers and the fossils found in them provide us with observable data. But when geologists study these data, they often come up with very different interpretations.

[4] This is because the assumptions scientists accept to begin with affect how they interpret the data.

[5] Assumptions are things that are assumed or taken for granted.

[6] Before we compare two different theories of earth history, let’s review a little background and some definitions. / Catastrophism is the idea that many geological formations were formed as a result of a catastrophe. Many of the earliest geologists worked from this assumption. / In 1830 Charles Lyell made famous a different idea that was originally suggested by a man named James Hutton. Uniformitarianism is the idea that geological formations formed gradually by the regular geological processes we see around us today.

[7] Lyell believed that natural laws

[8] and geological processes

[9] as well as the rates at which they happen

[10] and the conditions under which they happen have always been the same.

[11] Conventional geology today continues to accept the first two

[12] while moving away from the idea that the rate of the geological processes and the conditions under which they happened have always been the same.

[13] With that background, let’s compare the assumptions of conventional and short-age geology.

[14] According to Lyell and conventional geology today, the laws of nature have always been the same and some of that natural law is not yet understood.

[15] Short-age geology accepts this assumption and especially emphasizes that more of natural law is yet to be understood. But unlike conventional geology, short-age geology will not reject a hypothesis just because it implies events in the past that are outside of naturalistic science.

[16] The second principle of conventional geology—the uniformity of process—says that when possible, past results should be explained as the outcome of causes that are still operating today.

[17] Short-age geology accepts this assumption. Whether or not God initiated the global flood is not testable, but processes before, during, and after the flood are assumed to have operated according to known or potentially knowable laws of nature.

[18] Unlike Lyell, who believed that the rates of geological processes were constant, conventional geology today no longer believes that the rates have always been uniform. Whether individual formations formed slowly or catastrophically must be determined separately using the available evidence. Even though conventional geology accepts that some things formed rapidly, it does not deny the conventional billions of years of geologic time.

[19] Short-age geology agrees that rates have not always been uniform, agrees that the history of formations must be determined individually, but *does* deny the billions of years of geologic time.

[20] In a similar way, conventional geology does not assume that conditions have always been the same. This is testable, and the evidence is believed to indicate a progression in the development of landforms, plate tectonics, etc.

[21] Short-age geology agrees with the non-uniformity of conditions and predicts even *more* differences in conditions than conventional geology. Short-age geology believes that the geologic record is the result of a specific sequence of events beginning before the creation of life and leading up to the present day.

[22] Next let’s compare the interpretations resulting from conventional and short-age geology.

[23] …specifically how each looks at origins, the geologic record, and the issue of time.

[24] Conventional geology says that life evolved over millions of years,

[25] while short-age geology says that major groups of animals and plants were created.

[26] Conventional geology explains the existence of the geologic record by a combination of regular geologic processes generally like those observable today, combined with some catastrophes.

[27] Short-age geology explains the geologic record as the result of a world-wide catastrophe, after which geologic processes slowed to their current rates.

[28] Conventional geology estimates that the Phanerozoic portion of the geologic column was formed in about 545 million years.

[29] Short-age geology suggests that it formed in thousands, not millions of years.

[30] Short-age geology proposes that at some time in the past, a disturbance in the earth’s crust temporarily disrupted the normal relationships between land and water bodies, initiating a period of rapid geologic activity on a worldwide scale.

[31] This period of rapid erosion and sedimentation produced some significant portion of the geologic column.

[32] The geological and geophysical processes occurring during that event

* Determined the characteristics of the rock formations formed at that time
* Determined the distribution of fossils in the rocks
* Influenced the distribution of radioactive elements in those minerals used in radiometric dating.

[33] Notice that the propositions of short-age geology can be stated as descriptive statements / and they can be used to develop testable hypotheses about individual formations

[34] The fossil record poses difficulties for both models of earth’s history.

[35] For example / the Cambrian Explosion has challenged evolutionists ever since the time of Darwin. / The fact that most body plans appear without apparent ancestors in the Cambrian system is difficult to explain using the paradigm of conventional geology.

[36] In the same way, short-age geology is challenged by the radiometric dates of volcanic rock within the geologic column that are measured in millions instead of thousands of years.

[37] Short-age geology predicts that significant phenomena have yet to be discovered, and that when the data are in, / it will be determined that much of the geologic column was deposited in a short time.

[38] To summarize:

* The assumptions a scientist accepts influences how he or she interprets the data.
* Conventional and short-age geologists accept many of the same assumptions.
* Because short-age geologists will not reject a hypothesis just because it implies events in the past that are outside of naturalistic science, they actually consider a broader range of possibilities.
* Both conventional and short-age geology can suggest testable hypotheses.
* Both conventional and short-age geology face challenges from scientific data.