

# **Questions and Answers**

## **Chapter 1**

1) What are the two views for the origin of the earth's scenery?

Answer: Uniformitarianism and Flood geology

2) What is uniformitarianism?

Answer: The view that geology and the fossils can be explained by present processes over millions of years. It is simply defined as the present is the key to the past.

3) What is the geological subfield of geomorphology?

Answer: The science that studies the general configuration of the earth's surface, especially the classification, description, nature, and origin of landforms and their relationships to the underlying geological structures.

4) Why did God send the Genesis Flood?

Answer: Because it says in the Bible that "...that every intent of the thoughts of his [man's] heart was only evil continually" (Genesis 6:5b, NASB).

5) What is so significant of a nearly flat surface, capped by rounded rocks, on tilted hard and soft sedimentary rocks?

Answers: Such features are not forming today, but require a strong current to truncate both hard and soft rocks evenly and leaving behind rounded rocks on the top.

6) What is a pediment?

Answer: It is a planation surface that lies along the foot of a mountain, ridge, or plateau.

7) What is an inselberg?

Answer: It is an erosional remnant sticking up above a nearly flat surface.

8) What is a water gap?

Answer: It is a gorge through a mountain or plateau.

9) What is a submarine canyon?

Answer: It is a deep gorge excavated perpendicular to the shoreline through the continental shelf and slope of the continents and even off some large islands.

10) What are landforms?

Answer: They are features that taken together make up the surface of the earth. They include large-scale features like mountain ranges, plateaus, or plains, and small-scale features such as hills, valleys, slopes, canyons, or alluvial fans.

11) Why can't geologists explain the many mysteries of the earth's surface?

Answer: It is because of their unjustified assumption of uniformitarianism.

## Chapter 2

1) What is the Scripture evidences for a global Flood?

Answer: The language and context of Genesis 6-9; the account blends into Genesis 12-50, which is commonly accepted as history; local floods do not last 371 days; no need for animals to be on the ark; ark ended up in the mountains; tops of other mountains not seen for about 70 days; the rainbow covenant would make no sense with a local flood; and people and animals told to *repopulate* the earth.

2) About how many animals are needed on the ark?

Answer: 16,000 or less.

3) How many global flood legends exist from cultures all over the world?

Answer: More than 500.

4) Give one reason why the Epic of Gilgamesh is a degraded copy of the original Flood version.

Answer: The boat is cube shaped and would roll over in rough water.

5) What is one of the strongest evidences for the Flood as seen at Grand Canyon?

Answer: There is little or no erosion seen between the widespread layers of sedimentary rocks.

6) What do widespread sedimentary layers extending tens to hundreds of thousands of square miles mean?

Answer: These layers require at least a regional catastrophic event to deposit them, which is the style of sedimentation expected in the Flood.

7) What are two conditions necessary for the formation of fossils?

Answer: The organism must be buried rapidly and the degrading mechanisms under ground must be slowed or stopped.

8) Why didn't the Floodwater have to cover Mount Everest?

Answer: Because Mount Everest rose up out of the Floodwater at the end of the Flood, as indicated from Psalm 104:8.

9) How did Enlightenment scholars come to believe the Genesis Flood wrong?

Answers: They simply chose to believe the Genesis Flood was wrong.

10) The Flood can be divided up into what two stages?

Answer: The Flooding Stage and the Retreating Stage

11) During the Retreating Stage of the Flood, the water transforms from sheet flow into channelized flow. Could you describe this?

Answer: At first, the water was moving as wide currents over the earth (the Sheet Flow Phase), but as more and more mountains and plateaus became exposed above the water,

the Floodwater was forced to divert around these obstacles, becoming more channelized (the Channelized Flow Phase).

12) What is one of the new results of the RATE project?

Answer: The RATE project has discovered that the millions and billions of years that come out of radiometric dating are caused by a period of accelerated radiometric decay during the Creation week and possibly during the Flood.

### Chapter 3

1) How did God drain the Floodwater?

Answers: By raising the mountains and continents and causing the valleys and ocean basins to sink, the water then runs off the future continents and into the future oceans.

2) In what way does Psalm 104:6-9 refer to the Flood and not the condition of the earth early on Day 3?

Answer: In verse 6, God covered the mountains, while on Day 3, He uncovered the mountains. In verse 9, God set a boundary that the water may not return to cover the earth, which must refer to the last time the earth was globally flooded, which was at the peak of the Genesis Flood.

3) Based on the height of the granite in the Teton Mountains and the depth of the granite in Jackson Hole, what is the vertical change on the Teton Fault?

Answer: 33,000 feet (10,100 m).

4) Where did the thick accumulation of sediment in the Bighorn Basin come from?

Answer: The sediment, now hardened into sedimentary rock, came from the erosion of the surrounding mountains during uplift and from upcurrent to the south and west.

5) What is the greatest vertical change in the granite upper crust in the state of Wyoming?

Answer: It is 45,000 feet (13,415 m) between the top of the Wind River Mountains at 14,000 feet above sea level and the granite at 31,000 feet (9,450 m) below sea level in the Hanna Basin.

6) Is crustal uplift and sinking commonly seen over the earth?

Answer: yes

7) Is there geological evidence for one of the last major geological event in earth history that was responsible for the draining of the Floodwater?

Answer: Yes, it is that most mountain ranges rose recently, as documented by Ollier and Pain (2000) in their book *The Origin of Mountains*.

8) What is the maximum thickness of the sedimentary rocks off the east coast of North America?

Answer: It is 12.5 miles (20 km) thick in the Jeanne d'Arc Basin off southeast Canada.

9) What two pieces of evidence show that the ocean basins have sunk?

Answer: Deep troughs filled with sedimentary rocks just offshore and flat-topped volcanic mountains and plateaus called guyots well out from shore.

10) What is the evidence that guyots have sunk thousands of feet?

Answer: They have been sheared off flat by a powerful current, probably near sea level. The fact that the average depth of the guyot top is 5,000 feet (1,525 m) below sea level indicates much sinking of the ocean basins.

#### Chapter 4

1) What would cause general west to east currents during the Sheet Flow Phase of the Flood?

Answer: The spin of the earth or Coriolis effect

2) What is an anticline?

Answer: It is a dome or ridge caused when sedimentary rock has been uplifted.

3) How much sedimentary rock eroded from the top of the San Rafael Swell and how do we know this?

Answer: Up to 17,000 feet (5,200 m) was eroded. We know the amount of erosion by projecting the tilted sedimentary rock to the north up onto the axis of the San Rafael Swell.

4) What is an eroded escarpment?

Answer: It is a tall cliff or steep slope that resulted from erosion by water and not by faulting.

5) What does it mean for quartzite rocks to be rounded and spread 800 miles east of their nearest outcrop over a low slope?

Answer: It means high-speed Flood currents eroded the Rocky Mountains, rounding the rocks. Normal rivers cannot transport quartzite anywhere near that distance.

6) What are percussion marks and what do they mean?

Answer: Percussion marks are semicircular cracks on the surface of a rock. They are especially abundant on hard rocks. They indicate ferocious pounding of the rocks in a very turbulent flow of water.

7) How far have resistant rocks spread from the Appalachian Mountains?

Answer: About 650 miles to the south.

8) Based on Devils Tower, how thick were the sedimentary rocks above the present surface?

Answer: At least the height of the tower, 1,250 feet (380 m), since it is the throat of an eroded volcano and the lava must have moved upward through solid rock.

9) What is the significance of Devils Tower to uniformitarianism versus the Flood?

Answer: It shows that the sedimentary rocks around the Tower had to be eroded quickly, or else the Tower would not stand so tall. Devils Tower would not have remained standing if erosion was by slow processes over millions of years.

10) How did the continental shelf form during the Flood?

Answer: By tremendous sheet erosion coming off the continent and depositing the sediments in the deeper water along the continental margin as the currents slow.

11) How is the Portland Delta an example of Flood deposition along the continental margin?

Answer: The Portland Delta was deposited when the currents of the Lake Missoula flood slowed down at the mouth of the Columbia Gorge. This is similar to how the continental shelf formed by decreasing sheet current speed.

## Chapter 5

1) What is the difference between an erosion surface and a planation surface?

Answer: Both are eroded in hard rock, but an erosion surface is more rolling while a planation surface is flat or nearly flat.

2) What is so interesting about the Cypress Hills planation surface in Canada?

Answer: It is not only flat over an area that was once greater than 1,000 mi<sup>2</sup> (2,540 km<sup>2</sup>), but also it is capped with about 75 feet (23 m) of well-rounded quartzite cobbles and boulders from west of the continental divide—a transport distance of more than 250 miles (400 km).

3) Why are planation surfaces so difficult for uniformitarian scientists to explain?

Answer: They are not forming today (except on a very small scale when a river overflows its banks and planes a hill), and yet they are widespread all over the earth. They were even more widespread since they have been partly eroded away.

4) Why is it not possible that flat planation surfaces could have survived for many millions of years?

Answer: Because erosion on a million year time scale is so fast that such a flat surface should be dissected in no time at all. It shows that those dating methods that date the surface to many millions of years are wrong.

5) What is an inselberg?

Answer: It is an isolated residual knob or hill, rising abruptly from a lowland erosion surface. From a distance, it looks like an island jutting up from the sea, and the word in German means “island mountain.”

6) How tall are the highest inselbergs?

Answer: Over 2,000 feet (600 m) tall.

7) Tower karst are inselbergs in what kind of rock?

Answer: Limestone

8) Is it reasonable for inselbergs to stand tall for many millions of years?

Answer: No, erosion is so fast, especially on a vertical surface, that inselbergs should not last long.

9) Why is the Flood a superior mechanism for the formation of inselbergs?

Answer: Because inselbergs have to form fast, all the material around needs to be eroded. Present processes over millions of years, uniformitarianism, cannot produce inselbergs, but the fast erosion of the Flood during the formation of planation and erosion surfaces is expected to leave behind tall erosional remnants.

10) How are planation surfaces readily formed during the Flood?

Answer: With currents moving very fast, resistant rocks are transported at and near the bottom. These rocks scrape the surface, eroding it and flattening it, just like sandpaper smoothing rough wood.

11) Why do planation surfaces and inselbergs point to a global Flood?

Answer: Because the Flood can easily form these surface features, and since they are found worldwide, the Flood must be a global event.

12) What is the difference between a plateau, mesa, and butte?

Answer: A plateau is larger than a mesa, which is larger than a butte.

13) What is the difference between a planation surface and a flood plain or terrace?

Answer: A planation surface has been cut down into solid rock by water, while a flood plain or terrace is a deposit of sediments or gravel with a flat top. The former is erosional, while the latter is depositional.

## Chapter 6

1) According to the Flood model, which came first, the valley or the river?

Answer: The valley was eroded by the channelized Flood erosion, so the valley came first, and the river simply took advantage of the low spot and came second.

2) Why are vertical walled valleys generally young?

Answer: Because with time, vertical-walled valleys become more V-shaped.

3) How can large vertically-walled canyons be explained by the Genesis flood?

Answer: Large vertically-walled canyons were formed recently by a lot of water, and there has not been enough time since the Flood (4,500 years ago) for the canyon to become V-shaped.

4) What is a pediment?

Answer: A pediment is defined as: “A broad sloping erosion surface or plain of low relief, typically developed by running water at the base of an abrupt and receding mountain front” (Bates and Jackson, 1984, p. 372). It is essentially a planation surface at the foot of a mountain, mountain range, ridge, or plateau.

5) Why are pediments so difficult to explain by uniformitarianism?

Answer: Because they are not being formed today by present processes. They are being destroyed.

6) Why is Crickmay's superflooding hypothesis closer to the real origin of pediments than other hypotheses?

Answer: Because Crickmay realized that pediments were formed by a *lot of water* flowing *parallel* to the mountain range or ridge and not issuing out from the mountains or ridge. This deduction was based especially on the fact that some pediments are capped by exotic rocks from well upstream.

7) How would pediments form during the Channelized Flow Phase of the Flood?

Answer: Since pediments are essentially planation surfaces, they likely formed by the last high-speed flow down a valley with the subsequent water flow too weak to erode the pediment.

8) What does it mean that pediments are found all over the earth?

Answer: Similar to other geomorphological features, it means the Flood that produced the pediment was a global Flood and not a local flood.

9) What is a submarine canyon?

Answer: It is a deep chasm, averaging 30 miles (50 km) long and 3,000 feet (900 m) deep, perpendicular to the coast of the continents and large islands and cut in the continental shelf and/or slope.

10) Do uniformitarian scientists have a good explanation for the origin of submarine canyons?

Answer: They have two problematic hypotheses today that are difficult to prove. Otherwise, they have been unable to explain the origin of submarine canyons.

11) How can the Flood explain the origin of submarine canyons?

Answer: Submarine canyons can be eroded by narrow currents coming off the rising continents and depositing much sediment on the continental shelf during the Channelized Phase of the Flood. The sediments then slid down the continental slope, eroding a narrow canyon.

## Chapter 7

1) What is a water gap?

Answer: According to Bates and Jackson (1984, p. 559), a water gap is: "A deep pass in a mountain ridge, through which a stream flows; esp. a narrow gorge or ravine cut through resistant rocks."

2) What is the difference between a water gap and a wind gap?

Answer: A water gap is cut all the way through a barrier, so that a river or stream runs through the gorge. A wind gap is not cut down far enough, but is essentially an erosional notch in the barrier in which wind now passes through.

3) What are some water gaps in the western United States?

Answer: Hells Canyon, the Green River through the eastern Uinta Mountains, Grand Canyon, and the Shoshone River water gap.

4) Where are the deepest water gaps in the world?

Answer: Through the Himalaya Mountains from southern Tibet.

5) Why are the Zagros water gaps so enigmatic?

Answer: It is because there are 300 of them in “young” mountains, and they are constantly going through mountain gorges up to 8,000 feet (2,440 m) high and do not flow down valleys much. The rivers also pass in and out of barriers.

6) How would the Flood carve water gaps?

Answer: During the Channelized Flow Phase, narrow currents perpendicular to barriers would carve a notch through the barrier, causing the water to accelerate through the notch, and erode even more. The process continues until the Floodwater drains from the area. Afterwards, rivers and streams will naturally flow in the low area through the barrier.

7) How did the Palouse River water gap form during the Lake Missoula flood?

Answer: During the Lake Missoula flood, water rushed over a ridge between Washtucna Coulee and the Snake River. It carved downward, forming a 500-foot (150 m) deep canyon through the ridge. After the flood, the Palouse River no longer flowed down Washtucna Coulee, but instead takes a left hand turn and flows through the water gap into the Snake River.

8) What is the longest water gap in the world?

Answer: Grand Canyon

9) Have uniformitarian scientists explained the origin of Grand Canyon?

Answer: An emphatic No after over 50 years of trying.

10) What are two seemingly fatal observations to the creationist dam-breach hypothesis?

Answer: First, the complete absence of shorelines and high deltas for the suggested lakes, especially compared to previous bodies of water during the Ice Age, and second, the existence of long tributary canyons carved all the way down to the Colorado River in slot-like canyons.

11) What is the deepest water gap in the United States?

Answer: Hells Canyon along the Idaho-Oregon border.

12) How was the sedimentary rocks first eroded from off the Colorado Plateau, before Grand Canyon was carved?

Answer: By strong west to east sheet current flow during the Sheet Flow Phase of the Flood.

13) What probably caused the west to east sheet flow to reverse direction and channelize?

Answer: The rise of the southern Rocky Mountains blocked and broke up the west to east sheet flow, eventually causing an east to west flow. By this time other plateaus and mountains became exposed above the Floodwater resulting in channelized flow and the erosion of valleys and canyons.

14) Why did the draining Floodwater carve the Grand Canyon through the Kaibab Plateau at intermediate altitudes?

Answer: The whole area was covered by water. The converging of three wide currents from the northeast through the southeast of the Kaibab Plateau in the area of the present eastern Grand Canyon probably started the initial notch. Then erosion was generally like the formation of any other water gap after that.

15) What are two main problems with the uniformitarian antecedent stream hypothesis?

Answer: One is that streams must be older than the mountains according to the uniformitarian paradigm, and a second main problem is that aligned water gaps cannot be explained.

## Chapter 8

1) What is the main theme of this book?

Answer: That many surface features of the earth from the subfield of geomorphology cannot be explained by uniformitarianism but can readily be explained by the draining of the Floodwater off the land.

2) What seems to be the major problem in explaining landforms?

Answer: They were not formed by uniformitarianism, that is by slow processes over millions of years.

3) Did uniformitarian scientists prove the Genesis Flood wrong?

Answer: No, they just assumed it was wrong at a time when there was little knowledge of the rocks and fossils.

4) Because the sheet flow occurred before the channelized flow, what sort of multiple features should we see on the surface of the earth?

Answer: We should see landforms created first by sheet flow and secondly by superimposed channelized flow.

5) What does it mean for the rest of the Bible, if geological observations support the global Genesis Flood?

Answer: You can trust all of the Bible.

6) Is it actually predicted in the Bible that people will reject the Genesis Flood?  
Answer: Yes, in 2 Peter 3:3-6 the Bible predicts that in the last days, scoffers will deliberately ignore the evidence for the Flood.