The dinosaurs footprints and extinction Reading Passage

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A.

Everyone knows that asteroids killed dinosaurs. Something big hit Earth 65 million years ago, and when the dust settled, so did the great reptiles. So there is a beautiful symmetry, even irony, to the idea that similar influences led to the rise of dinosaurs. This is the paper published this week in the journal Science by Paul Olson and colleagues at Columbia University.

B.

Dinosaurs first appeared in the fossil record 230 million years ago and ate meat during the Triassic period. But they are mostly small and share territories with many other reptiles. During the next Jurassic, beginning 202 million years ago, they took over the earth and turned into the monsters described in the Jurassic books and films. Park. (In fact, the dinosaurs on the screen are from the recent Cretaceous period.) Dr. Olson and his colleagues aren't the first to suggest dinosaurs inherited Earth from an asteroid collision. But they are the first to show that acquisitions are made in the blink of an eye.

C.

Dinosaur bones are rare. However, there are astonishingly several dinosaur footprints. The scale of the fingerprint is pretty much as good a guide to the size of the animal as the bone itself. Olson and his colleagues centered on fingerprints rather than bones.

D.

The print in question was created in jap North America, at a time when elements of the planet were crammed with rift valleys like those in contemporary East Africa. Just like the fashionable Rift Valley, the yank Triassic/Jurassic lakes additionally contained lakes that sporadically distended and narrowed, thanks to climate changes caused by diurnal shifts in Earth's orbit. (A

similar development in modern ice ages.) This regularity, combined with the reversal of the Earth's magnetic field, is detectable within the little magnetic fields of some magnetic minerals. , which suggests rock from that location and over an amount of your time that can be determined with certainty. one thousand years. As a bonus, lakeshore sediment is precisely what records the tracks of passing animals. Because of the division of labor, the ten authors of the paper were ready to study these trajectories across eighty sites.

E.

Researchers studied 18 of the so-called ichnotaxis. These are types of recognizable tracks that cannot be accurately attributed to the species of animal that left them which serves as an indicator of the goal of this group. However, 6 disappears in the limit or exceeds it. Three appear out of nowhere once Jurassic begins.

F.

The border itself is suggestive. The primary geologic sign of a dinosaur-killing result was an extraordinarily high concentration of a range of 77 metallic element metal in rocks at the top of the Cretaceous period, once the animals disappeared from the fossil record. The metallic element is typically rare on the Earth's surface, however, is found in larger quantities in meteorites. As folks began to believe the impact theory, they began to look for alternative anomalies within the Late Cretaceous. A stunning number of pteridophyte spores occur in rocks on top of the physical {phenomenon} - a phenomenon referred to as "fern spikes".

G.

That agrees with the theory. Many modern ferns are opportunistic. They cannot compete with foliage plants, but when a piece of land is cleared, for example by volcanic evacuation, they are usually the first to settle there. An asteroid impact may have destroyed much of the country's plant cover and provided shelter for ferns. Therefore, a female spike on the rocks is a good sign that the terrible south has entered.

H.

Anomalous metallic elements and feminine are gifts within the higher Triassic. This was the explanation for the ichnotaxa's demise: the creatures that created them were unable to survive the carnage. It's wonderful how quickly the new ichnotaxa appeared.

I.

Dr. I. Olson and his colleagues believe that the reason for this speedy development is also a development referred to as ecological clearance. This can be seen these days, once reptiles (which tend to be little creatures in fashionable times) arrive on the islands while not a rival. The foremost spectacular example is found on the Indonesian island of Komodo, where native lizards grow so massive that they're typically known as dragons. In different words, dinosaurs solely thrive once the sport is eliminated.

J.

This raises the question of wherever the impact occurs. The big hole within the Earth's crust doesn't seem to be 202 million years old. Of course, this may be ignored. previous craters are scoured and buried and aren't invariably simple to find. or even he is gone. Though the continental crust is a lot or less permanent, the seafloor is consistently being regenerated by tectonic processes that cause continental drift. The sea bottom that's quite two hundred million years old has disappeared, and the crater that is fashioned below the ocean floor has currently been submerged.

K.

However, there's a 3rd possibility. It's this crater well-known however wrong date. The Manicouagan “structure" could be a crater in Quebec that's believed to be 214 million years old. It's massive - regarding a hundred kilometers in diameter - and seems to be the biggest of 3 to 5 craters that formed within hours once items of a disintegrating extraterrestrial body hit Earth.

The dinosaurs footprints and extinction reading questions

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1?

In boxes 1-6 on your answer sheet, write

YES *if the statement agrees with the information*
NO *if the statement contradicts the information*
NOT GIVEN *if there is no information on this passage*

1. Dr. Paul Olson and his colleagues believe the asteroid impact may have conjointly increased the number of dinosaurs.

2. Books and moving-picture shows like Jurassic Park often exaggerate the scale of the dinosaurs.

3. Dinosaur footprints are more appropriate than dinosaur bones.

4. The footprints were chosen by Dr. Olsen to study because they are easier to detect than the Earth's magnetic field for accurate geological dating over thousands of years.

5. Ichnotaxa showed that dinosaur footprints provide precise information about the footprints left by individual species.

6. More iridium can be found on the Earth's surface than in meteorites.

Questions 7-11

Complete the following summary of the paragraphs of Reading Passage 1, using ***no more than two words*** *for each answer.*

Write your answers in boxes 7-11 on your answer sheet.

Dr. Olson and his colleagues applied a phenomenon called...7.....to explain the large size of Eubrontes, which is similar to what is now the case with reptiles invading a place without 8……; For example, on an island called Komodo, the giant native lizards grow so large that they are even thought to be… 9…. However, no ancient impact marks were found. The answer may be we have... 10... the evidence. Old craters are hard to see, or they could be…11…. due to the movement of the earth.

Questions 12-14

Answer questions from 12-14 below.

*Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer.*

12. Dr. I. Olson and his colleagues believe that the reason for this speedy development is also a development referred to as?

13. A stunning number of pteridophyte spores occur in rocks on top of the physical {phenomenon} - a phenomenon referred to as?

14. The foremost spectacular example is found on the Indonesian island of Komodo, where native lizards grow so massive that they're typically known as?