Unit 10 GeoMation: 100 Yards of Geologic Time

It is 4.6 billion years ago. You were on the goal line Beaver Stadium and you have to drive 100 yards to today where you're taking Geosciences 10. The earth is forming 4.6 billion years ago. Giant meteorites are streaming in. And when they hit the surface, they make great explosions and collisions that heat the planet so much that they evaporate the ocean. And the last one of those that was big enough to evaporate the upper part of the ocean that was warmed by the sun and given energy by the sun is about 3.8 billion years ago, which leaves you 83 yards to drive to get to the goal.

Beyond this, the continents are forming. They're no longer getting blasted. And so you start to see continents show up that the cores of the modern things and they're sitting out there very nicely. And they are formed so that you get an idea of what the world is going to be like by about 2.5 billion years ago, which is a mere 54 yards to get your touchdown.

There are bacteria in the ocean and the bacteria are committing acts of flatulence. They're putting oxygen up. The oxygen changes the composition of the atmosphere, it changes the oceans, and it eventually allows bigger critters to appear. And those bigger creators include shelly critters which suddenly make lots of interesting rocks, limestones. And so you start to get lots of shells showing up about 570 million years ago, which is a mere 12 yards to get the goal line. The shells are doing really well.

And then there's a really bad day. The ocean gets very warm from greenhouse and it belches out bad gases and most of the things alive die. And that happens about 225 million years ago at the end of the Paleozoic which is only five yards from the goal.

That clears up space so that you start to get dinosaurs. And as you know, dinosaurs were really big and they're sort of cute critters. And so you start getting dinosaurs in the Mesozoic. And here is a dinosaur if you would like one. and the dinosaurs are having a fine time and they're smiling a lot.

But there's another meteorite coming. And so the big meteorite comes screaming in and it kills the dinosaurs, and that changes the world a lot. And that happens about 65 million years ago which is only one and a half yards from the goal.

That makes room for mammals to show up, and so you start to see mammals such as this elephant that you're about to see here. This elephant happens to be running away from you. And the elephant has some big ears and a really curly tail.

And that comes up to recorded history. And recorded history, 6,000 years ago, just a little over the thickness of a sheet of paper.

And finally, to the culmination of creation to you, who are born about 1/200th of the thickness of a sheet of paper from the goal line today.