

Hard Time, Deep Time, Real Time

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Field Trip Leader for everyone.

Just how do you go about teaching people just how long geological time is? One common way is by analogy with the length of a football field. If you spread 570 million years (radioactive age date for the beginning of animals with hard parts during the Cambrian) over 100 yards, trilobites appear at 5 yards, mammals at 88 yards, and historic times (10,000 years) in the last 1/3 of an inch. Just how well does the public grasp this analogy? HGMS volunteers decided to find out: we made this analogy real during the celebration of Darwin Day (Feb 7, 2009) at the Houston Museum of Natural Science.

The Grand Hall of the museum is perfect for this activity because it is more than 100 yards long. We laid out duct tape, stretching from the Butterfly Center to the ticket counters, and marked off the geological periods. We made about 200 stick-on labels – each with a picture of an organism and its dates – for visitors to stick on the floor next to the timeline. They loved it, particularly the parentally suppressed young decorators. We had numerous visitors, including numerous geoscientists, walking the time line to see when various animals appear and how things go from simple to complex. People frequently commented on just how many things were crammed into the last foot (Pleistocene to Recent). I think that visitors could better visualize time from this real model than from the verbal one. If you want to try this at your place, I have placed all the computer files for the labels on the publicly accessible Houston Gem and Mineral Society web page (www.hgms.org) in the K-12 directory. You might get a better reception from the custodial staff if the labels had removable glue.

All the geo-volunteers involved thought we should bring in a pavement saw and make the display permanent. Geology profs from Blinn and San Jacinto Colleges were thinking hard about nice long sidewalks on their campuses where this kind of time line could be made out of brick and tiles.



The timeline runs from the present to



Volunteer helping a visitor to make his mark.

Details

I have included all the labels to stick on the time line. They are formatted to be printed on Avery Label 5263 a 2x4 inch label. I used permanent labels but the custodians would have much rather I used removable labels. If you use permanent labels, you should know that paint thinner removes the goo left behind.

The labels are given in PDF, and OpenOffice formats. I prefer to use OpenOffice because the picture import works much better than in Excel. I have included a blank page to assist you in writing new pages of labels. I have also included an Excel spreadsheet for calculating the length of each time segment.

OpenOffice is freeware. Just go to <http://www.openoffice.org/> and download it. You will never need to buy Microsoft Office products again!

Let me know how this works for you.

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