



**BLACK ROCK DESERT
HIGH ROCK CANYON
EMIGRANT TRAILS**



NATIONAL CONSERVATION AREA

HOW DOES THIS WORK?

- If all of Earth's history were reduced down into one hour, from when the Earth's crust formed until today, this is the order of events and the approximate times at which they occurred in minutes and seconds.
- The Earth's crust would form during the first second of the hour.
- The beginning of life (we think) would take place after 9 minutes and 18 seconds.
- The oldest rocks still preserved on the Earth's surface would have been formed after 10 minutes and 27 seconds, so on and so forth.
- To show 4.6 billion years in one hour, (the age of the Earth) each minute equals 76.7 million years, and each second equals 1.3 million years.
- So, in actuality the time from when the Earth's crust formed until the Inferred origin of life would not be 9 minutes and 17 seconds, but instead 724.1 million years. That's a long time!!

THINGS TO NOTICE

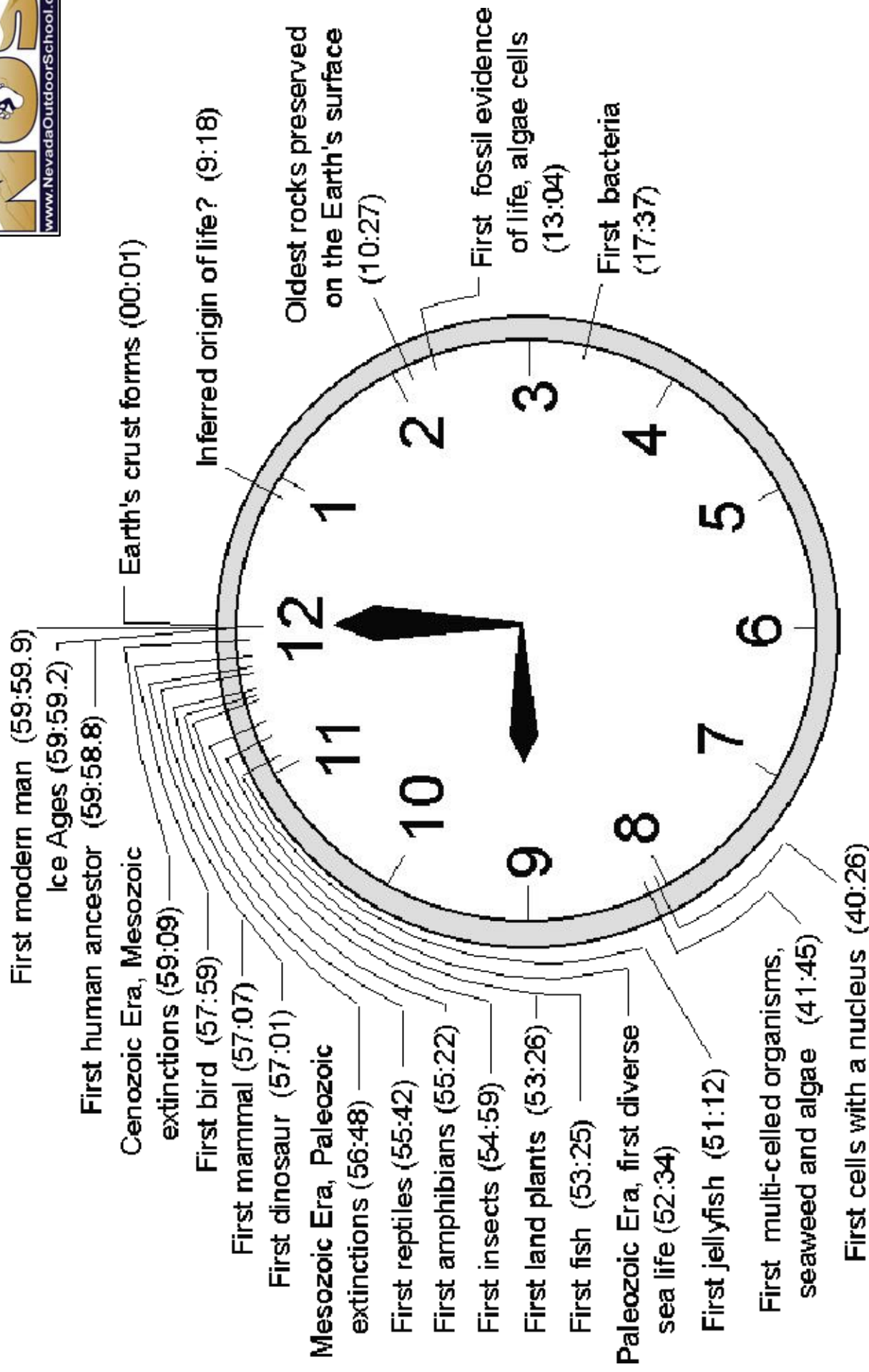
- Observe how much time passed between the First bacteria (17:37) and the First cells with a nucleus (40:26), that's 1.8 billion years! Why do you think there is such a large gap here?
- Also, look at the last five minutes of the hour. Why do you think there was so much going on during this time?
- When does the first modern man appear? Knowing this how does your outlook on other species change?

LAKE LAHONTAN

- The dried up lake that once covered what is now the Great Basin area was present during the Plesitocene epoch which was 1.6 million years ago.
- If you place the existence of the lake on the time clock it would have been around when the first human ancestors appeared (59:58.8).



Time Clock



4.6 billion years in one hour