



**the** history of life on

**the**

**e on**

1  
00:00:05,930 --> 00:00:03,470  
so the three pieces of data we have are

2  
00:00:07,309 --> 00:00:05,940  
the date on the clock that is now 14

3  
00:00:08,270 --> 00:00:07,319  
billion years since the beginning of the

4  
00:00:10,310 --> 00:00:08,280  
universe

5  
00:00:11,930 --> 00:00:10,320  
there's the piece of data that at the

6  
00:00:13,789 --> 00:00:11,940  
moment we don't see anything in the sky

7  
00:00:15,470 --> 00:00:13,799  
that's data

8  
00:00:17,930 --> 00:00:15,480  
and the third piece of data is when we

9  
00:00:19,730 --> 00:00:17,940  
look at the history of life on Earth we

10  
00:00:22,070 --> 00:00:19,740  
can see certain key events happened at

11  
00:00:24,830 --> 00:00:22,080  
certain dates and that gives us a key

12  
00:00:26,630 --> 00:00:24,840  
clue to basically how many hard steps

13  
00:00:28,609 --> 00:00:26,640

life had to go through to get to where

14

00:00:31,310 --> 00:00:28,619

we are and that's another key parameter

15

00:00:33,350 --> 00:00:31,320

so with those three parameters each one

16

00:00:35,870 --> 00:00:33,360

of them tells us about one of the three

17

00:00:37,910 --> 00:00:35,880

parameters in this three parameter model