1
00:00:12,629 --> 00:00:02,710
hi i'm jennifer stern join me as we

2
00:00:16,550 --> 00:00:14,070
i work on an instrument called the

3
00:00:18,470 --> 00:00:16,560
sample analysis at mars instrument suite

4
00:00:20,150 --> 00:00:18,480
on the curiosity rover and what that

5
00:00:21,910 --> 00:00:20,160
does is it measures the chemical

6
00:00:23,910 --> 00:00:21,920
composition of the surface in the

7
00:00:26,550 --> 00:00:23,920
atmosphere of mars my particular

8
00:00:28,630 --> 00:00:26,560
interest is nitrogen compounds

9
00:00:30,790 --> 00:00:28,640
one really cool thing that we found is

10
00:00:32,870 --> 00:00:30,800
nitrate it's a biologically and

11
00:00:35,030 --> 00:00:32,880
chemically available source of nitrogen

12
00:00:37,350 --> 00:00:35,040
it's used by biology to make

13
00:00:39,590 --> 00:00:37,360

biomolecules such as amino acids and

14
00:00:42,150 --> 00:00:39,600
nucleobases so working on sample

15
00:00:44,549 --> 00:00:42,160
analysis at mars and the curiosity rover

16
00:00:46,630 --> 00:00:44,559
is awesome because we're making these

17
00:00:48,389 --> 00:00:46,640
complex chemical measurements on the

18
00:00:49,350 --> 00:00:48,399
surface of another planet

19
00:00:51,350 --> 00:00:49,360
these are measurements that are

20
00:00:53,670 --> 00:00:51,360
difficult sometimes to even make in your

21
00:00:55,590 --> 00:00:53,680
own laboratory and yet