



1
00:00:10,879 --> 00:00:08,990
hi my name is Dave Grohl and I lead the

2
00:00:12,620 --> 00:00:10,889
team responsible for assembling testing

3
00:00:15,320 --> 00:00:12,630
and launching the next rover to land on

4
00:00:17,029 --> 00:00:15,330
the surface of Mars curiosity the team

5
00:00:18,529 --> 00:00:17,039
just recently installed the mobility

6
00:00:20,840 --> 00:00:18,539
system onto the sides of the rover

7
00:00:23,120 --> 00:00:20,850
that's the wheels there's six wheels

8
00:00:24,800 --> 00:00:23,130
three in each side they all have to be

9
00:00:26,509 --> 00:00:24,810
verified that they're actuators work and

10
00:00:28,130 --> 00:00:26,519
then they're steering actuators to which

11
00:00:30,439 --> 00:00:28,140
what we use to actually turn the rover

12
00:00:32,450 --> 00:00:30,449
when it's on the surface there are ten

13
00:00:33,770 --> 00:00:32,460

small little motors that make up that

14

00:00:35,750 --> 00:00:33,780

mobility system and what the team is

15

00:00:36,920 --> 00:00:35,760

doing right now is they're going through

16

00:00:39,049 --> 00:00:36,930

and making sure that each of those

17

00:00:40,760 --> 00:00:39,059

wheels spins forward and backwards and

18

00:00:42,380 --> 00:00:40,770

rotates if necessary from a steering

19

00:00:44,090 --> 00:00:42,390

point of view so that when the rover

20

00:00:45,860 --> 00:00:44,100

gets down to the surface of Mars it can

21

00:00:47,360 --> 00:00:45,870

successfully navigate itself over the

22

00:00:49,069 --> 00:00:47,370

rocks and the Train that are actually

23

00:00:50,660 --> 00:00:49,079

there on the surface as soon as we

24

00:00:52,310 --> 00:00:50,670

finish up the mobility check out they'll

25

00:00:54,500 --> 00:00:52,320

be putting the mast on the top deck of

26
00:00:55,910 --> 00:00:54,510
the rover and the mast is more cameras

27
00:00:57,680 --> 00:00:55,920
and imaging that allows it to take

28
00:00:59,750 --> 00:00:57,690
stereo pictures off in the distance of

29
00:01:01,400 --> 00:00:59,760
Mars just like your eyes work in stereo

30
00:01:03,759 --> 00:01:01,410
pair this camera will also return the

31
00:01:06,679 --> 00:01:03,769
stereo imagery from the surface of Mars

32
00:01:08,060 --> 00:01:06,689
once that's complete then the front deck

33
00:01:10,130 --> 00:01:08,070
of the rover which is empty right now

34
00:01:12,320 --> 00:01:10,140
where we'll put the robotic arm the

35
00:01:14,270 --> 00:01:12,330
robotic arm is a device that reaches out

36
00:01:16,310 --> 00:01:14,280
six feet or so and actually touches the

37
00:01:18,350 --> 00:01:16,320
surface take samples and then deposits

38
00:01:20,030 --> 00:01:18,360

those samples back into the innards of

39

00:01:21,800 --> 00:01:20,040

the rover for the science instruments to

40

00:01:24,100 --> 00:01:21,810

analyze and determine what the elemental

41

00:01:26,060 --> 00:01:24,110

compositions are of the surface of Mars

42

00:01:28,550 --> 00:01:26,070

over here on my left you'll see the

43

00:01:30,050 --> 00:01:28,560

descent stage the descent stage just

44

00:01:31,999 --> 00:01:30,060

went through a test where they actually

45

00:01:33,590 --> 00:01:32,009

shook it just like it would experience

46

00:01:35,870 --> 00:01:33,600

when it's out going through the launch

47

00:01:37,310 --> 00:01:35,880

and they wanted to make sure that the

48

00:01:38,600 --> 00:01:37,320

the design held together and then

49

00:01:41,660 --> 00:01:38,610

nothing broke and everything was

50

00:01:43,010 --> 00:01:41,670

successful with that test - this has

51
00:01:45,050 --> 00:01:43,020
been your update and the Assembly of the

52
00:01:46,609 --> 00:01:45,060
curiosity vehicle as you can see

53
00:01:48,260 --> 00:01:46,619
curiosity's looking more and more like a

54
00:01:50,359 --> 00:01:48,270
rover everyday and the team is working