



#AskNASA

HOW ARE WE GOING
TO THE MOON?

1
00:00:00,500 --> 00:00:01,334
[Clap]

2
00:00:02,001 --> 00:00:03,336
Hi I'm Lindsay Aitchison.

3
00:00:03,403 --> 00:00:04,170
I work on spacesuits.

4
00:00:04,237 --> 00:00:06,606
This is #AskNASA and
I'm here to answer your

5
00:00:06,673 --> 00:00:07,173
questions.

6
00:00:07,674 --> 00:00:12,011
[Music]

7
00:00:13,012 --> 00:00:14,948
How will NASA
get to the Moon?

8
00:00:15,014 --> 00:00:18,351
Well, we have a brand new
SLS Space Launch System

9
00:00:18,418 --> 00:00:19,552
rocket.

10
00:00:19,619 --> 00:00:22,322
It's launch day and oh the
fire and smoke, oh the

11
00:00:22,389 --> 00:00:23,757
power, oh the power, you're

12
00:00:23,823 --> 00:00:26,259

up in space and at that
point you lose your abort

13

00:00:26,326 --> 00:00:29,229

system so let that go back
to Earth and then one more

14

00:00:29,295 --> 00:00:32,699

big push and now your
Orion is taking three days

15

00:00:32,766 --> 00:00:36,770

to fly all the way over
to the Gateway where, it

16

00:00:36,836 --> 00:00:39,773

parks and now you and now
you're ready to start the

17

00:00:39,839 --> 00:00:40,440

next phase.

18

00:00:40,507 --> 00:00:41,775

This is where youre going
to start to unload the

19

00:00:41,841 --> 00:00:44,010

science equipment and
pull out your spacesuits.

20

00:00:44,077 --> 00:00:44,677

And then it's

21

00:00:44,744 --> 00:00:45,345

time for the fun stuff.

22

00:00:45,412 --> 00:00:47,414

Were going down to
the lunar surface.

23

00:00:48,615 --> 00:00:49,916

So once you put on
your spacesuit, you're

24

00:00:49,983 --> 00:00:52,318

going to crawl into the
ascent module and that

25

00:00:52,385 --> 00:00:55,455

will take you all the way
down to the lunar surface.

26

00:00:55,522 --> 00:00:56,122

Once you're

27

00:00:56,189 --> 00:00:58,358

there, go outside start
doing science, geology.

28

00:00:58,425 --> 00:01:00,226

Spend a couple of days,
once you're done doing all

29

00:01:00,293 --> 00:01:03,530

that, you climb back into
your ascent module, take

30

00:01:03,596 --> 00:01:04,998

off and return
to the Gateway.

31

00:01:05,064 --> 00:01:06,933

Once you get back
to the Gateway, you're

32

00:01:07,000 --> 00:01:08,535

going to unpack all
of your science and

33

00:01:08,601 --> 00:01:10,370
everything you wanna take
home, put it into the

34

00:01:10,437 --> 00:01:12,972
Orion, everybody truckles
back into the Orion, we

35

00:01:13,039 --> 00:01:14,774
start that three-day
journey back home.

36

00:01:14,841 --> 00:01:15,842
[Buzzer]

37

00:01:19,946 --> 00:01:21,881
Why do we need a gateway
to get to the Moon?

38

00:01:21,948 --> 00:01:23,550
Were going to the Gateway
because it makes a lot of

39

00:01:23,616 --> 00:01:25,118
sense for sustainability.

40

00:01:25,185 --> 00:01:27,253
That means you can go back
multiple times and use it

41

00:01:27,320 --> 00:01:29,122
to get anywhere
around the Moon.

42

00:01:29,189 --> 00:01:31,324
You can also use it as a
staging point on our way

43

00:01:31,391 --> 00:01:32,792
to Mars.

44

00:01:32,859 --> 00:01:35,428

How will humans
explore Mars?

45

00:01:35,495 --> 00:01:36,095

Well that's

46

00:01:36,162 --> 00:01:37,430

actually kind of what
we are trying to learn by

47

00:01:37,497 --> 00:01:38,164

going back to the Moon.

48

00:01:38,231 --> 00:01:40,633

In addition to learning to
learning so much about how

49

00:01:40,700 --> 00:01:41,968

the Moon was created,
which tells us how Earth

50

00:01:42,035 --> 00:01:42,635

was created, we're

51

00:01:42,702 --> 00:01:45,104

really practicing all
those new technologies as

52

00:01:45,171 --> 00:01:47,273

new ways of living off
the Earth before we go to

53

00:01:47,340 --> 00:01:47,941

Mars.

54

00:01:48,007 --> 00:01:49,809

So once we get there we'll

of practiced everything on

55

00:01:49,876 --> 00:01:51,845

the Moon and then
we can head out.

56

00:01:52,846 --> 00:01:57,817

[Music and Laughter]

57

00:01:59,052 --> 00:02:01,955

So, what will the Gateway
Wi-Fi password be?

58

00:02:02,021 --> 00:02:04,357

Hopefully something
easy to remember.

59

00:02:04,424 --> 00:02:05,825

Would you go to the Moon?

60

00:02:05,892 --> 00:02:06,493

Absolutely.

61

00:02:06,559 --> 00:02:07,894

Do I get to choose
who goes with me?

62

00:02:07,961 --> 00:02:11,498

Have you worn an
astronaut glove?

63

00:02:11,564 --> 00:02:12,465

Yes I have.

64

00:02:12,532 --> 00:02:14,367

As part of a spacesuit
engineer we try on all of

65

00:02:14,434 --> 00:02:16,603

our own hardware.

66

00:02:16,669 --> 00:02:17,704

How does NASA
throw a party?

67

00:02:17,760 --> 00:02:19,900

Ya planet.

68

00:02:19,920 --> 00:02:22,380

If you could go anywhere
in the solar system, where

69

00:02:22,380 --> 00:02:23,740

would you go?

70

00:02:23,880 --> 00:02:24,480

Probably Mars.

71

00:02:24,480 --> 00:02:26,120

I mean, its far enough
to be interesting.

72

00:02:26,240 --> 00:02:28,140

First one there, but still
close enough to home if

73

00:02:28,200 --> 00:02:29,040

you have a problem.

74

00:02:29,100 --> 00:02:30,960

What's the coolest thing
about a spacesuit?

75

00:02:30,960 --> 00:02:32,520

The coolest thing about a
spacesuit is that they are

76

00:02:32,520 --> 00:02:34,660

made to fit you exactly
so you can have all the

77

00:02:34,680 --> 00:02:37,060

mobility you need to both
do your job and stay

78

00:02:37,060 --> 00:02:37,720

alive.

79

00:02:39,240 --> 00:02:40,900

[Music and Laughter]

80

00:02:41,580 --> 00:02:43,300

Do you have a
question for NASA?

81

00:02:43,300 --> 00:02:45,780

Send your questions to our
experts on Twitter, using