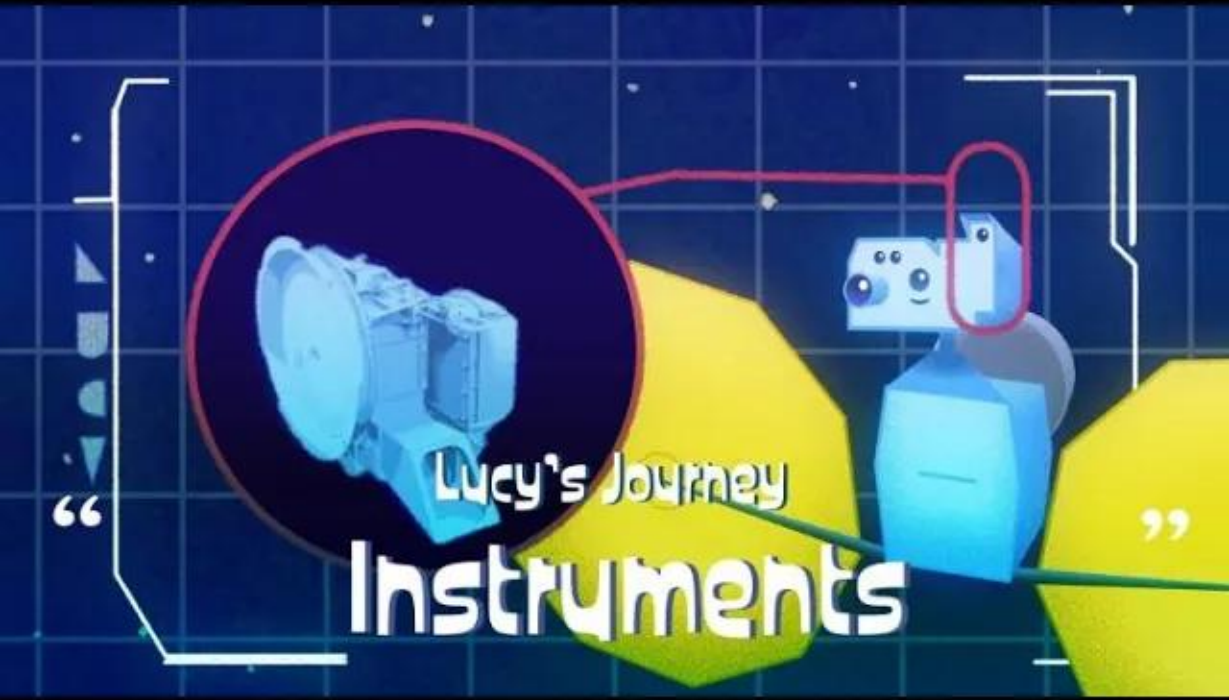
Lucy's Journey
Instruments

1
00:00:00,000 --> 00:00:04,129
(music throughout)

2
00:00:04,166 --> 00:00:07,750
Nope, Lucy, still
a little way to go before

3
00:00:07,750 --> 00:00:10,166
you get to your first Trojan asteroid.

4
00:00:10,583 --> 00:00:14,833
But it looks like you're coming up to
the main belt asteroid, Donald Johanson.

5
00:00:16,000 --> 00:00:19,333
Right. This will give you a chance
to check in on your instrumentation

6
00:00:19,583 --> 00:00:21,666
before you get out to the Trojans.

7
00:00:21,666 --> 00:00:23,750
This first instrument is called L'Ralph.

8
00:00:24,083 --> 00:00:26,666
It will take color
images of the Trojan asteroids

9
00:00:26,833 --> 00:00:30,083
using visible and infrared light,
helping scientists

10
00:00:30,083 --> 00:00:34,333
map craters and mountains and figure out
what the asteroids are made out of.

11
00:00:34,750 --> 00:00:36,750
Next, this is L'LORRI.

12
00:00:36,750 --> 00:00:38,916
The long range reconnaissance imager.

13
00:00:39,500 --> 00:00:40,833
This camera will provide

14
00:00:40,833 --> 00:00:44,833
the most detailed images
of the surfaces of the Trojan asteroids.

15
00:00:44,833 --> 00:00:49,250
To help scientists figure out what's been
happening since our Solar System formed.

16
00:00:49,416 --> 00:00:52,750
This is L'TES, the thermal
emission spectrometer,

17
00:00:53,166 --> 00:00:55,166
basically a touchless thermometer.

18
00:00:55,166 --> 00:00:58,500
It will measure the temperatures
on the Trojan asteroids' surfaces

19
00:00:58,500 --> 00:01:01,916
to tell scientists
whether the surfaces are rocky or dusty.

20
00:01:02,500 --> 00:01:05,916
Lastly, you couldn't get the job done
without your tracking cameras

21
00:01:05,916 --> 00:01:10,333
or the T2CAMS to make sure
the asteroids are always in view

22
00:01:10,916 --> 00:01:14,083
and the high gain antenna

that lets you communicate with Earth.

23
00:01:14,250 --> 00:01:17,416
The scientists back at home
will use your radio signals

24
00:01:17,583 --> 00:01:20,750
to measure the mass of each
asteroid as you fly past it.

25
00:01:22,083 --> 00:01:24,416
That's right, Lucy.

26
00:01:24,500 --> 00:01:25,666
How could I forget?

27
00:01:25,666 --> 00:01:28,416
You also have two huge solar panels

28
00:01:28,666 --> 00:01:32,250
to give you electrical power
as you fly out to the Trojan asteroids.

29
00:01:32,750 --> 00:01:36,166
Farther from the Sun
than any previous solar powered mission.

30
00:01:36,750 --> 00:01:39,916
Just a bit longer
now before you get to your first target.

31
00:01:40,666 --> 00:01:44,333
Rest up and get ready to put
all of those instruments to good use.