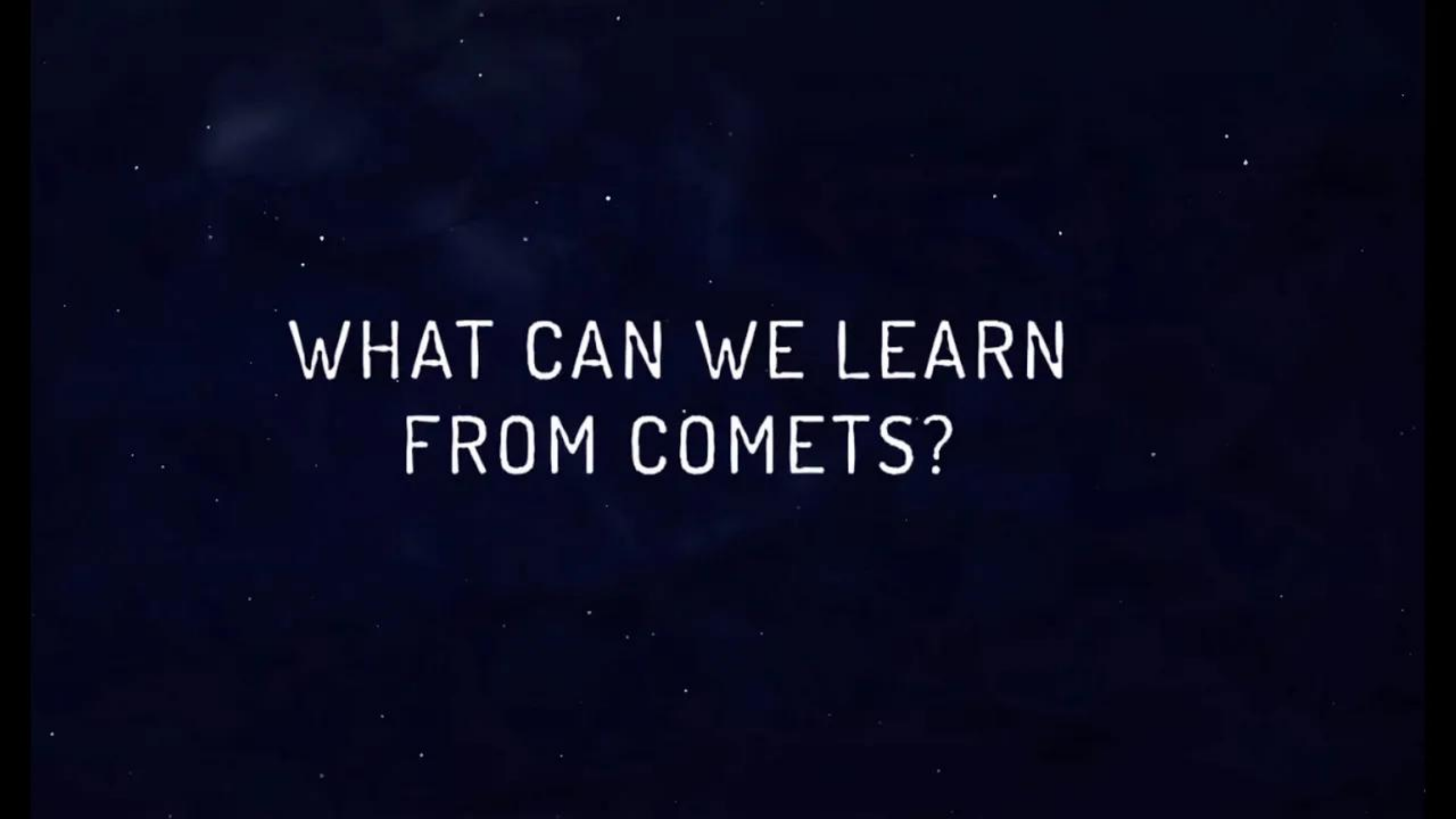
WHAT CAN WE LEARN
FROM COMETS?

1
00:00:20,940 --> 00:00:17,910
Rosella really excites me because it's a

2
00:00:24,390 --> 00:00:20,950
mission of a whole bunch of firsts it's

3
00:00:27,030 --> 00:00:24,400
the first time that we are living with a

4
00:00:30,960 --> 00:00:27,040
comet it's the first time we're going to

5
00:00:33,120 --> 00:00:30,970
be landing on a comet comet CG as we

6
00:00:35,549 --> 00:00:33,130
call it is a good fit because miss comet

7
00:00:40,139 --> 00:00:35,559
was in the right plane was coming in at

8
00:00:42,869 --> 00:00:40,149
the right angle to the Sun comet

9
00:00:45,410 --> 00:00:42,879
churyumov-gerasimenko is named after the

10
00:00:49,020 --> 00:00:45,420
two astronomers who discovered it the

11
00:00:50,610 --> 00:00:49,030
comet changes dramatically between being

12
00:00:52,110 --> 00:00:50,620
far away from the Sun and getting in

13
00:00:54,360 --> 00:00:52,120

close to the Sun and watching those

14
00:00:57,979 --> 00:00:54,370
changes take place over time we're going

15
00:01:02,689 --> 00:01:00,979
on board the spacecraft are a whole host

16
00:01:04,100 --> 00:01:02,699
of instruments some of them require that

17
00:01:05,870 --> 00:01:04,110
you very close to the comet whereas

18
00:01:11,780 --> 00:01:05,880
other ones especially the cameras prefer

19
00:01:18,750 --> 00:01:14,210
this is going to be the first time ever

20
00:01:23,460 --> 00:01:21,120
rosetta is going to provide us with an

21
00:01:26,550 --> 00:01:23,470
unprecedented characterization of a

22
00:01:32,580 --> 00:01:26,560
comet that provides us a window to the

23
00:01:34,170 --> 00:01:32,590
early phases of the solar system I like

24
00:01:36,870 --> 00:01:34,180
to think of it is we're essentially

25
00:01:40,470 --> 00:01:36,880
doing archeology of our own solar system

26
00:01:46,460 --> 00:01:40,480
it may tell us where the origin of the

27
00:01:51,150 --> 00:01:49,710
also comet of organics and some of the

28
00:01:53,190 --> 00:01:51,160
organics made may have been at the

29
00:01:56,850 --> 00:01:53,200
origin of life on Earth and perhaps

30
00:01:58,860 --> 00:01:56,860
elsewhere we wouldn't be going there if

31
00:02:01,680 --> 00:01:58,870
we already knew what was there one of

32
00:02:03,870 --> 00:02:01,690
the reasons we do this is we hope for

33
00:02:05,670 --> 00:02:03,880
surprises scientifically that's why we

34
00:02:08,130 --> 00:02:05,680
do this that's why we do Rosetta is

35
00:02:10,889 --> 00:02:08,140
difficult it's gonna give us so much

36
00:02:12,930 --> 00:02:10,899
information so much science so we're

37
00:02:15,390 --> 00:02:12,940
very excited data has started to come