



WHERE DID
OUR MOON
COME
FROM?



1
00:00:00,185 --> 00:00:04,137
Where did our Moon come from?

2
00:00:09,310 --> 00:00:08,000
NASA

3
00:00:09,310 --> 00:00:13,313
Well, actually, there have been several theories over many decades.

4
00:00:13,713 --> 00:00:17,917
Earlier versions of lunar formation theories included capture,

5
00:00:17,917 --> 00:00:20,887
where the Moon would have been a strayed planetoid.

6
00:00:21,421 --> 00:00:24,557
Another version was fission, where the Earth was spinning

7
00:00:24,557 --> 00:00:30,964
so fast that it would have blorped out
of the Earth and then formed its own body.

8
00:00:31,398 --> 00:00:35,035
This led to our current theory, the giant impactor theory.

9
00:00:35,168 --> 00:00:39,572
So this collision was during the late
stages of planetary formation

10
00:00:39,572 --> 00:00:44,978
throughout our entire solar system,
when planets were still very new and very much forming.

11
00:00:45,011 --> 00:00:47,847
So this happened when Earth was just an embryo —

12
00:00:47,881 --> 00:00:51,184
a baby planet, and this was actually in a crash course

13
00:00:51,184 --> 00:00:55,755
collision with Theia, which is a Mars-size planetoid.

14
00:00:55,855 --> 00:01:00,026
And this collision ripped apart early Earth's crust.

15
00:01:00,026 --> 00:01:03,163
And that crust then coalesced. It snowballed

16
00:01:03,329 --> 00:01:06,933
into a whole separate entity, which we now call the Moon.

17
00:01:07,934 --> 00:01:10,236
So where did our Moon come from?

18
00:01:10,470 --> 00:01:13,873
Well, currently, our understanding is that the Earth

19
00:01:14,074 --> 00:01:17,410
had collided with a Mars-sized object named Theia.

20
00:01:17,610 --> 00:01:22,782
But once we send future astronauts to the lunar surface again, who knows?

21
00:01:22,916 --> 00:01:26,786
We may actually have a whole new theory in the coming decades.