



Dr. Bill Cooke

NASA's Meteoroid Environment Office

1
00:00:00,984 --> 00:00:02,952
[MUSIC PLAYING]

2
00:00:05,200 --> 00:00:09,020
A meteoroid is a
tiny particle up

3
00:00:09,100 --> 00:00:11,960
to boulder size out in space.

4
00:00:12,140 --> 00:00:14,480
And it can be a
piece of an asteroid.

5
00:00:14,540 --> 00:00:15,670
A piece of a comet.

6
00:00:15,860 --> 00:00:19,430
Or in rare cases, a piece
of a planet like Mars.

7
00:00:19,600 --> 00:00:22,570
So this meteoroid is
this object out in space.

8
00:00:22,740 --> 00:00:25,010
But when it comes near the
Earth and hits the Earth's

9
00:00:25,040 --> 00:00:27,450
atmosphere, it burns up.

10
00:00:27,580 --> 00:00:29,470
Or mostly burns up.

11
00:00:29,470 --> 00:00:32,220
And it leaves that streak
of light in the sky.

12

00:00:32,220 --> 00:00:35,660

And we call that a meteor,
or a shooting star.

13

00:00:35,660 --> 00:00:38,130

And the meteor doesn't
refer to the object.

14

00:00:38,280 --> 00:00:40,690

It doesn't refer to the
rock, the meteoroid.

15

00:00:40,690 --> 00:00:43,360

It refers to the streak
of light you see.

16

00:00:43,360 --> 00:00:46,060

So a streak of light in
the night sky is a meteor.

17

00:00:46,060 --> 00:00:48,200

And if it's big
enough and it moves

18

00:00:48,200 --> 00:00:50,600

slow enough-- real
slow for meteors.

19

00:00:50,760 --> 00:00:53,370

And I'm talking like
30,000 miles per hour,

20

00:00:53,370 --> 00:00:55,180

which is slow for a meteor.

21

00:00:55,180 --> 00:00:57,220

And makes it to the ground.

22

00:00:57,240 --> 00:00:58,670

That's a meteorite.

23

00:00:58,670 --> 00:01:03,530

So a meteorite is the rock
you pick up off the ground.

24

00:01:03,540 --> 00:01:06,200

And that's what a lot
of people look for.

25

00:01:06,200 --> 00:01:08,230

You know, they get all
excited about finding

26

00:01:08,320 --> 00:01:10,390

a meteorite on the ground.