1
00:00:04,630 --> 00:00:02,629
[Music]

2
00:00:07,430 --> 00:00:04,640
what's up for may

3
00:00:07,990 --> 00:00:07,440
this month a rocky planet roundup and a

4
00:00:11,270 --> 00:00:08,000
super

5
00:00:13,749 --> 00:00:11,280
blood moon eclipse

6
00:00:15,669 --> 00:00:13,759
beginning mid-may if you can find a

7
00:00:17,670 --> 00:00:15,679
clear view toward the western horizon

8
00:00:18,070 --> 00:00:17,680
you'll have an opportunity to see all

9
00:00:20,230 --> 00:00:18,080
four

10
00:00:21,670 --> 00:00:20,240
of the rocky inner planets of our solar

11
00:00:24,150 --> 00:00:21,680
system at the same time

12
00:00:24,790 --> 00:00:24,160
with your own eyes starting around may

13
00:00:26,790 --> 00:00:24,800

14th

14
00:00:28,550 --> 00:00:26,800
cast your gaze to the west about half an

15
00:00:31,509 --> 00:00:28,560
hour after sunset local time

16
00:00:32,229 --> 00:00:31,519
to see if you can spot mercury venus and

17
00:00:35,110 --> 00:00:32,239
mars

18
00:00:35,670 --> 00:00:35,120
and well earth is kind of hard to miss

19
00:00:37,270 --> 00:00:35,680
to see

20
00:00:39,590 --> 00:00:37,280
near the horizon you need an

21
00:00:40,790 --> 00:00:39,600
unobstructed view free of nearby trees

22
00:00:42,630 --> 00:00:40,800
and buildings

23
00:00:44,630 --> 00:00:42,640
some of the best places for this are the

24
00:00:47,029 --> 00:00:44,640
shores of lakes or the beach

25
00:00:48,229 --> 00:00:47,039
open plains or high up on a mountain or

26
00:00:49,910 --> 00:00:48,239
tall building

27
00:00:51,350 --> 00:00:49,920
in addition to the planet from around

28
00:00:53,189 --> 00:00:51,360
the 14th through the 17th

29
00:00:55,430 --> 00:00:53,199
the crescent moon joins the party for a

30
00:00:58,150 --> 00:00:55,440
lovely planetary tableau

31
00:00:59,830 --> 00:00:58,160
now venus will be really low in the sky

32
00:01:01,029 --> 00:00:59,840
it'll be easier to observe on its own

33
00:01:02,709 --> 00:01:01,039
later in the summer

34
00:01:04,710 --> 00:01:02,719
but for now take advantage of this

35
00:01:07,910 --> 00:01:04,720
opportunity to observe all of the inner

36
00:01:11,670 --> 00:01:07,920
planets in a single view

37
00:01:13,990 --> 00:01:11,680
may 26th brings a total lunar eclipse

38
00:01:15,429 --> 00:01:14,000

over several hours the moon will pass

39
00:01:17,590 --> 00:01:15,439
through earth's shadow

40
00:01:19,030 --> 00:01:17,600
causing it to darken and usually become

41
00:01:20,870 --> 00:01:19,040
reddish in color

42
00:01:22,789 --> 00:01:20,880
the red color comes from sunlight

43
00:01:24,469 --> 00:01:22,799
filtering through earth's atmosphere a

44
00:01:26,469 --> 00:01:24,479
ring of light created by all the

45
00:01:28,070 --> 00:01:26,479
sunrises and sunsets happening around

46
00:01:29,990 --> 00:01:28,080
our planet at that time

47
00:01:31,510 --> 00:01:30,000
because of the reddish color a lunar

48
00:01:34,789 --> 00:01:31,520
eclipse is often called

49
00:01:35,910 --> 00:01:34,799
a blood moon just how red it will look

50
00:01:37,749 --> 00:01:35,920
is hard to predict

51
00:01:39,510 --> 00:01:37,759
but dust in the atmosphere can have an

52
00:01:40,469 --> 00:01:39,520
effect and keep in mind there have been

53
00:01:43,190 --> 00:01:40,479
a couple of prominent

54
00:01:45,030 --> 00:01:43,200
volcanic eruptions recently lunar

55
00:01:46,950 --> 00:01:45,040
eclipses take place when the moon is

56
00:01:48,789 --> 00:01:46,960
full and this full moon happens when the

57
00:01:49,749 --> 00:01:48,799
moon is also near the closest point to

58
00:01:53,030 --> 00:01:49,759
earth in its orbit

59
00:01:55,030 --> 00:01:53,040
often called a super moon unlike solar

60
00:01:56,870 --> 00:01:55,040
eclipses which you should never look at

61
00:01:58,469 --> 00:01:56,880
it's safe to view lunar eclipses with

62
00:02:00,550 --> 00:01:58,479
your eyes and

63
00:02:02,230 --> 00:02:00,560

unlike solar eclipses which tend to have

64
00:02:03,830 --> 00:02:02,240
a narrower viewing path

65
00:02:05,590 --> 00:02:03,840
lunar eclipses are at least partly

66
00:02:06,709 --> 00:02:05,600
visible from anywhere on the planet's

67
00:02:08,630 --> 00:02:06,719
night side

68
00:02:10,630 --> 00:02:08,640
now eclipses happen at the same moment

69
00:02:12,470 --> 00:02:10,640
no matter where you are on earth but the

70
00:02:13,510 --> 00:02:12,480
time your clock reads during the eclipse

71
00:02:15,670 --> 00:02:13,520
depends of course

72
00:02:17,910 --> 00:02:15,680
on your time zone the best viewing for

73
00:02:19,990 --> 00:02:17,920
this eclipse is in the pacific rim

74
00:02:21,430 --> 00:02:20,000
that's the western parts of the americas

75
00:02:24,229 --> 00:02:21,440
australia and new zealand

76
00:02:25,670 --> 00:02:24,239
and eastern asia for the u.s the best

77
00:02:28,470 --> 00:02:25,680
viewing will be in hawaii

78
00:02:29,430 --> 00:02:28,480
alaska and the western states for the

79
00:02:31,430 --> 00:02:29,440
eastern u.s

80
00:02:32,470 --> 00:02:31,440
the eclipse begins for you during dawn

81
00:02:34,070 --> 00:02:32,480
twilight

82
00:02:35,750 --> 00:02:34,080
you may be able to observe the first

83
00:02:37,509 --> 00:02:35,760
part of the eclipse as the moon just

84
00:02:39,750 --> 00:02:37,519
starts to darken but the moon will be

85
00:02:41,430 --> 00:02:39,760
near or on the horizon as earth's shadow

86
00:02:43,190 --> 00:02:41,440
begins to cover it

87
00:02:44,790 --> 00:02:43,200
the farther west you are the more of the

88
00:02:46,869 --> 00:02:44,800

eclipse you'll be able to see before the

89
00:02:48,470 --> 00:02:46,879
moon sets that morning

90
00:02:50,229 --> 00:02:48,480
those in the western half of the country

91
00:02:53,030 --> 00:02:50,239
will be able to see almost the entire

92
00:02:53,589 --> 00:02:53,040
eclipse so if you're in the path of this

93
00:02:55,110 --> 00:02:53,599
eclipse

94
00:02:56,949 --> 00:02:55,120
check your local times for the best

95
00:02:58,869 --> 00:02:56,959
viewing near you and if you're in the

96
00:03:00,949 --> 00:02:58,879
u.s be prepared to get up early if you

97
00:03:05,110 --> 00:03:00,959
want to see this rare celestial event

98
00:03:09,270 --> 00:03:05,120
a super blood moon eclipse

99
00:03:12,949 --> 00:03:10,869
you can catch up on all of nasa's

100
00:03:15,110 --> 00:03:12,959
missions to explore the solar system and

101
00:03:16,630 --> 00:03:15,120
beyond at nasa.gov

102
00:03:18,470 --> 00:03:16,640
i'm preston dykes from nasa's jet