
WHAT'S UP
SKYWATCHING HIGHLIGHTS
NOVEMBER 2022
NASA

1
00:00:06,170 --> 00:00:02,110
[Music]

2
00:00:09,950 --> 00:00:06,180
what's up for November a lunar eclipse

3
00:00:12,350 --> 00:00:09,960
moon and planets and the Leonid meteors

4
00:00:14,509 --> 00:00:12,360
a total lunar eclipse is on the way to

5
00:00:16,609 --> 00:00:14,519
provide a little Celestial magic early

6
00:00:18,470 --> 00:00:16,619
on the morning of November 8th

7
00:00:20,510 --> 00:00:18,480
the eclipse will be visible to viewers

8
00:00:23,150 --> 00:00:20,520
in North America the Pacific region

9
00:00:24,950 --> 00:00:23,160
Australia and Eastern Asia anywhere the

10
00:00:27,109 --> 00:00:24,960
Moon is above the Horizon while the

11
00:00:28,670 --> 00:00:27,119
eclipse is happening for observers in

12
00:00:30,950 --> 00:00:28,680
the Eastern time zone of the U.S and

13
00:00:33,350 --> 00:00:30,960

Canada the partial eclipse begins a

14
00:00:36,170 --> 00:00:33,360
little after 4 AM it reaches full

15
00:00:38,090 --> 00:00:36,180
eclipse about 5 15 local time and the

16
00:00:39,049 --> 00:00:38,100
moon then sets while still in eclipse

17
00:00:41,209 --> 00:00:39,059
for you

18
00:00:42,950 --> 00:00:41,219
for observers on the west coast of North

19
00:00:45,170 --> 00:00:42,960
America that translates to the partial

20
00:00:47,410 --> 00:00:45,180
eclipse beginning just after 1am and

21
00:00:50,029 --> 00:00:47,420
reaching full eclipse by about 2 15 am

22
00:00:52,130 --> 00:00:50,039
you'll be able to see the entire Eclipse

23
00:00:53,930 --> 00:00:52,140
unfold Before Sunrise weather permitting

24
00:00:56,090 --> 00:00:53,940
as the moon exits the dark part of

25
00:00:58,790 --> 00:00:56,100
Earth's Shadow called the Umbra a few

26
00:01:00,229 --> 00:00:58,800
minutes before 5 A.M during a lunar

27
00:01:02,510 --> 00:01:00,239
eclipse you'll likely notice that you

28
00:01:05,030 --> 00:01:02,520
can see a lot more faint stars as the

29
00:01:07,789 --> 00:01:05,040
usually brilliant full moon dims to a

30
00:01:10,190 --> 00:01:07,799
dull red and during this Eclipse viewers

31
00:01:12,770 --> 00:01:10,200
with binoculars can spy an extra treat

32
00:01:14,570 --> 00:01:12,780
the ice giant planet Uranus will be

33
00:01:15,830 --> 00:01:14,580
visible just a fingers width away from

34
00:01:18,050 --> 00:01:15,840
the eclipsed Moon

35
00:01:19,910 --> 00:01:18,060
check your local details to find out if

36
00:01:22,010 --> 00:01:19,920
the eclipse is visible from your area

37
00:01:24,120 --> 00:01:22,020
and find lots more Eclipse info from

38
00:01:26,870 --> 00:01:24,130

NASA at the address on your screen

39
00:01:29,330 --> 00:01:26,880
[Music]

40
00:01:32,090 --> 00:01:29,340
on hours of November 11th you'll find

41
00:01:35,510 --> 00:01:32,100
the moon directly between Mars and the

42
00:01:36,590 --> 00:01:35,520
bright bluish star elmath elnath is the

43
00:01:38,390 --> 00:01:36,600
second brightest star in the

44
00:01:40,789 --> 00:01:38,400
constellation Taurus after reddish

45
00:01:43,429 --> 00:01:40,799
aldebaran and it forms the northern Horn

46
00:01:45,050 --> 00:01:43,439
of the bull you'll find that elnath is

47
00:01:47,810 --> 00:01:45,060
about the same brightness as the star of

48
00:01:49,490 --> 00:01:47,820
Bellatrix in nearby Orion where it forms

49
00:01:51,530 --> 00:01:49,500
one of the Hunter's shoulders

50
00:01:54,350 --> 00:01:51,540
on November 20th in the hour before

51
00:01:56,450 --> 00:01:54,360
Sunrise look to the southeast to find a

52
00:01:59,510 --> 00:01:56,460
slim Crescent Moon hanging right above

53
00:02:01,910 --> 00:01:59,520
the bright bluish star Spica it's a

54
00:02:04,209 --> 00:02:01,920
giant star 10 times the mass of our sun

55
00:02:07,069 --> 00:02:04,219
and 12 000 times more luminous

56
00:02:08,570 --> 00:02:07,079
fortunately for us it's located 260

57
00:02:11,089 --> 00:02:08,580
light years away

58
00:02:13,190 --> 00:02:11,099
and in the evening sky on November 28th

59
00:02:16,790 --> 00:02:13,200
a beautiful Crescent Moon hangs beneath

60
00:02:19,130 --> 00:02:16,800
Saturn in the south after sunset

61
00:02:21,589 --> 00:02:19,140
the Leonid meteor shower is active

62
00:02:23,510 --> 00:02:21,599
throughout November it Peaks after

63
00:02:25,850 --> 00:02:23,520

midnight on the 18th with something like

64
00:02:28,790 --> 00:02:25,860
15 to 20 meteors per hour under clear

65
00:02:31,070 --> 00:02:28,800
Dark Skies the shower's name comes from

66
00:02:33,530 --> 00:02:31,080
the constellation Leo the lion from

67
00:02:35,390 --> 00:02:33,540
which its meteors appear to radiate the

68
00:02:37,430 --> 00:02:35,400
meteors are dusty bits of debris left

69
00:02:38,809 --> 00:02:37,440
behind by Comet Temple Tuttle as it

70
00:02:41,330 --> 00:02:38,819
orbits the Sun

71
00:02:42,949 --> 00:02:41,340
this Comet was actually discovered twice

72
00:02:44,930 --> 00:02:42,959
independently

73
00:02:47,030 --> 00:02:44,940
on the peak night for the leonids this

74
00:02:49,190 --> 00:02:47,040
year the moon will be about 35 percent

75
00:02:50,750 --> 00:02:49,200
full meaning it will interfere with your

76
00:02:53,509 --> 00:02:50,760
ability to see the fainter meteors

77
00:02:56,449 --> 00:02:53,519
however Leonid meteors are often bright

78
00:02:57,890 --> 00:02:56,459
with Trails also called trains that

79
00:03:00,290 --> 00:02:57,900
persist for a couple of seconds after

80
00:03:02,270 --> 00:03:00,300
they streak across the sky and while the

81
00:03:04,610 --> 00:03:02,280
moon will be rising in the East with Leo

82
00:03:06,470 --> 00:03:04,620
around midnight it's actually better to

83
00:03:08,809 --> 00:03:06,480
view the sky away from the meteor's

84
00:03:10,670 --> 00:03:08,819
apparent point of origin by lying back

85
00:03:13,070 --> 00:03:10,680
and looking straight upward as any

86
00:03:15,710 --> 00:03:13,080
meteor Trails you see will appear longer

87
00:03:17,570 --> 00:03:15,720
and more spectacular

88
00:03:20,030 --> 00:03:17,580

here are the phases of the moon for

89
00:03:21,770 --> 00:03:20,040
November

90
00:03:23,630 --> 00:03:21,780
stay up to date with all of NASA's

91
00:03:25,970 --> 00:03:23,640
missions to explore the solar system and

92
00:03:27,890 --> 00:03:25,980
Beyond at nasa.gov

93
00:03:29,630 --> 00:03:27,900
I'm Preston Dykes from NASA's jet

94
00:03:30,940 --> 00:03:29,640
propulsion laboratory and that's what's