
APOLLO 11


APOLLO 15
SCOTT WORDEN IRWIN


APOLLO 16
YOUNG • MATTINGLY • DUKE


APOLLO XVII
CERNAN • EVANS • SCHMITT

1
00:00:08,080 --> 00:00:05,840
what's up for November see all the

2
00:00:10,640 --> 00:00:08,090
phases of the Moon by day and by night

3
00:00:12,890 --> 00:00:10,650
hello and welcome I'm Jane Houston Jones

4
00:00:16,460 --> 00:00:12,900
from NASA's Jet Propulsion Laboratory in

5
00:00:18,560 --> 00:00:16,470
Pasadena California November weather can

6
00:00:21,470 --> 00:00:18,570
be challenging for backyard astronomers

7
00:00:24,200 --> 00:00:21,480
but the moon is a reliable target even

8
00:00:26,330 --> 00:00:24,210
when there are clouds the moon takes

9
00:00:29,570 --> 00:00:26,340
about 29 days to go around the earth

10
00:00:32,630 --> 00:00:29,580
once and it also takes the moon about 29

11
00:00:34,430 --> 00:00:32,640
days to spin once on its axis this

12
00:00:38,030 --> 00:00:34,440
causes the same side of the moon to

13
00:00:40,340 --> 00:00:38,040

always face Earth on November 3rd the

14
00:00:43,069 --> 00:00:40,350
moon reaches last quarter when it rises

15
00:00:44,660 --> 00:00:43,079
at midnight and sets at noon this is a

16
00:00:49,760 --> 00:00:44,670
great time to see the moon in the

17
00:00:51,889 --> 00:00:49,770
morning sky on November 11th the new

18
00:00:54,500 --> 00:00:51,899
moon isn't visible because it's between

19
00:00:58,279 --> 00:00:54,510
Earth and the Sun and the unlit side

20
00:01:00,410 --> 00:00:58,289
faces earth in the days after the new

21
00:01:03,200 --> 00:01:00,420
moon the slender Crescent gets bigger

22
00:01:05,870 --> 00:01:03,210
and brighter look just after sunset on

23
00:01:10,010 --> 00:01:05,880
November 13th and 14th near the Setting

24
00:01:12,200 --> 00:01:10,020
Sun in the western sky the next phase on

25
00:01:14,149 --> 00:01:12,210
November 19th is called the first

26
00:01:16,580 --> 00:01:14,159
quarter because the moon has traveled

27
00:01:20,210 --> 00:01:16,590
one quarter of its 29 day orbit around

28
00:01:22,160 --> 00:01:20,220
Earth the moon rises at noon and sets at

29
00:01:24,770 --> 00:01:22,170
midnight so you can see it in the

30
00:01:27,440 --> 00:01:24,780
afternoon sky it will rise higher in the

31
00:01:29,179 --> 00:01:27,450
sky after dark that's when you can look

32
00:01:31,100 --> 00:01:29,189
for the areas where four of the six

33
00:01:33,770 --> 00:01:31,110
Apollo missions landed on the moon

34
00:01:35,990 --> 00:01:33,780
you won't see the landers flag or

35
00:01:38,149 --> 00:01:36,000
footprints but it's fun and easy to see

36
00:01:42,410 --> 00:01:38,159
these historic places with your own eyes

37
00:01:45,770 --> 00:01:42,420
or with binoculars look for three dark

38
00:01:49,010 --> 00:01:45,780

smooth Marya or seas the middle one is

39
00:01:51,200 --> 00:01:49,020
the Sea of Tranquility Apollo 11 landed

40
00:01:55,999 --> 00:01:51,210
very near a bright crater on the edge of

41
00:01:58,730 --> 00:01:56,009
the Samari in 1969 the Apollo 15 16 and

42
00:02:00,950 --> 00:01:58,740
17 landing areas formed the points of a

43
00:02:02,899 --> 00:02:00,960
triangle above and below the Apollo 11

44
00:02:05,510 --> 00:02:02,909
site

45
00:02:07,969 --> 00:02:05,520
the full moon is the next phase on the

46
00:02:11,960 --> 00:02:07,979
14th day of the lunar cycle which is

47
00:02:13,640 --> 00:02:11,970
November 25th it rises at sunset and is

48
00:02:16,460 --> 00:02:13,650
visible all night long

49
00:02:18,680 --> 00:02:16,470
setting its sunrise the 15 day old moon

50
00:02:21,650 --> 00:02:18,690
will rise an hour after sunset on

51
00:02:24,920 --> 00:02:21,660
Thanksgiving November 26th you may see

52
00:02:27,050 --> 00:02:24,930
some interesting features and this is a

53
00:02:30,410 --> 00:02:27,060
great time to see the impact rays of

54
00:02:32,990 --> 00:02:30,420
some of the larger craters you can learn

55
00:02:36,280 --> 00:02:33,000
about NASA's historic and current lunar

56
00:02:39,979 --> 00:02:36,290
missions and all of NASA's missions at