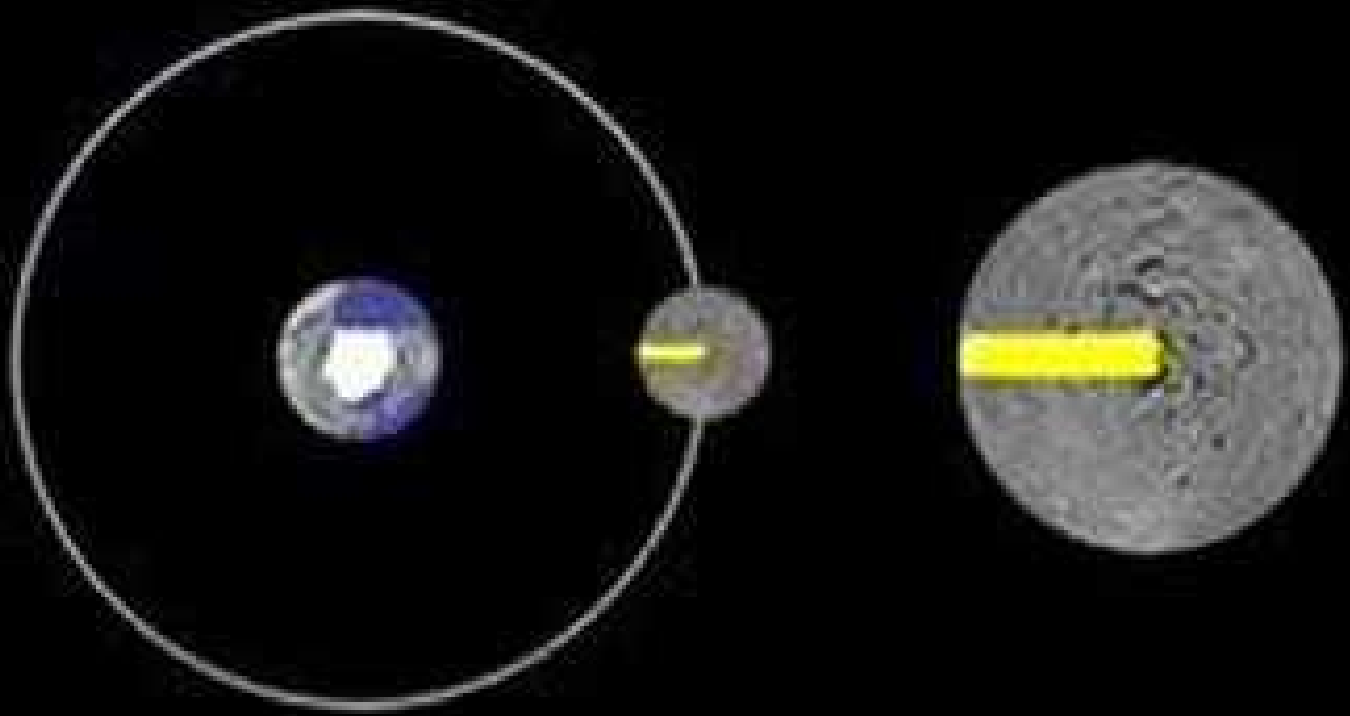

Moon's orbit
= 29 days

Moon's rotation
= 29 days

1
00:00:07,030 --> 00:00:04,820
what's up for July this month I'll be

2
00:00:09,919 --> 00:00:07,040
taking you on a guided tour of the moon

3
00:00:12,740 --> 00:00:09,929
hello and welcome I'm Jane Houston Jones

4
00:00:15,890 --> 00:00:12,750
with NASA's Jet Propulsion Laboratory in

5
00:00:17,750 --> 00:00:15,900
Pasadena California the moon has some

6
00:00:21,260 --> 00:00:17,760
great features that you can see with the

7
00:00:24,439 --> 00:00:21,270
unaided eye first look for bright rays

8
00:00:26,660 --> 00:00:24,449
or long white lines these are streaming

9
00:00:29,630 --> 00:00:26,670
from impact craters on the moon surface

10
00:00:32,120 --> 00:00:29,640
these craters and their dramatic rays

11
00:00:35,000 --> 00:00:32,130
were created less than 1 billion years

12
00:00:38,240 --> 00:00:35,010
ago when asteroids or comets hit the

13
00:00:40,190 --> 00:00:38,250

moon another really cool site you can

14
00:00:42,860 --> 00:00:40,200
see without a telescope is the Sea of

15
00:00:45,950 --> 00:00:42,870
Tranquility this is where the Apollo 11

16
00:00:49,940 --> 00:00:45,960
astronauts took humankind's first steps

17
00:00:52,189 --> 00:00:49,950
on the moon in 1969 you won't be able to

18
00:00:55,130 --> 00:00:52,199
see their footsteps or the flag they

19
00:00:58,880 --> 00:00:55,140
planted or the spacecraft even with a

20
00:01:01,459 --> 00:00:58,890
telescope now here are some facts about

21
00:01:03,860 --> 00:01:01,469
the moon it takes about twenty nine days

22
00:01:06,710 --> 00:01:03,870
to go around the earth once and it also

23
00:01:09,920 --> 00:01:06,720
takes the moon about 29 days to spin

24
00:01:13,040 --> 00:01:09,930
once on its axis this means we always

25
00:01:16,190 --> 00:01:13,050
see the same side of the moon

26
00:01:18,890 --> 00:01:16,200
as the moon orbits earth the portion we

27
00:01:22,190 --> 00:01:18,900
see illuminated changes we call these

28
00:01:24,650 --> 00:01:22,200
changes phases the first phase called

29
00:01:27,470 --> 00:01:24,660
the new moon is just a sliver and very

30
00:01:30,590 --> 00:01:27,480
difficult to see at first but each night

31
00:01:32,450 --> 00:01:30,600
it gets bigger and brighter the next

32
00:01:34,670 --> 00:01:32,460
phase is called the first quarter moon

33
00:01:37,730 --> 00:01:34,680
because it has traveled one quarter of

34
00:01:40,940 --> 00:01:37,740
its 29 day orbit it's the easiest phase

35
00:01:43,720 --> 00:01:40,950
to observe it rises at noon and sets at

36
00:01:46,970 --> 00:01:43,730
midnight a full moon is the next phase

37
00:01:50,330 --> 00:01:46,980
the full moon is behind earth in space

38
00:01:52,910 --> 00:01:50,340

with respect to the Sun the last quarter

39
00:01:55,790 --> 00:01:52,920
moon follows the full moon each night it

40
00:01:57,350 --> 00:01:55,800
rises later and we see less of it we'll

41
00:02:00,890 --> 00:01:57,360
have more to say about the moon next

42
00:02:08,290 --> 00:02:00,900
month plus meteors and Mars to learn

43
00:02:16,220 --> 00:02:13,130
www.cash or sky charts at education JPL

44
00:02:18,500 --> 00:02:16,230
nasa gov just click on the what's up