WHAT'S UP

1
00:00:00,000 --> 00:00:03,000
Music.

2
00:00:03,000 --> 00:00:07,000
Jane Houston Jones: What's Up for April. A total lunar eclipse!

3
00:00:07,000 --> 00:00:14,000
Hello and welcome. I'm Jane Houston Jones from NASA's Jet Propulsion Laboratory in Pasadena, California.

4
00:00:14,000 --> 00:00:20,000
On April 4 be on the lookout for a total lunar eclipse.

5
00:00:20,000 --> 00:00:24,000
A lunar eclipse takes place on the night of a full moon,

6
00:00:24,000 --> 00:00:30,000
when the moon is on the opposite side of Earth from the Sun and the moon passes into Earth's shadow.

7
00:00:30,000 --> 00:00:35,000
This can occur only when the Sun, Earth and moon are all aligned.

8
00:00:35,000 --> 00:00:40,000
An eclipse begins when the moon first moves into the less-dense part of Earth's shadow--

9
00:00:40,000 --> 00:00:43,000
what astronomers call the penumbra--

10
00:00:43,000 --> 00:00:48,000
then into the deepest shadow--or umbra.

11
00:00:48,000 --> 00:00:53,000
The April 4 lunar eclipse covers the Pacific and can be seen from parts of

12
00:00:53,000 --> 00:00:59,000
Australia, New Zealand and eastern Asia to the western parts of North America.

13
00:00:59,000 --> 00:01:03,999

Here are the times for the various stages of the lunar eclipse on the West Coast of the United States.

14
00:01:04,000 --> 00:01:04,999
...and passes below bright Jupiter on the 25th to the 27th.

15
00:01:05,000 --> 00:01:12,000
On the East Coast the eclipse begins near dawn, and the moon will set before the eclipse has ended.

16
00:01:12,000 --> 00:01:17,000
The total eclipse--the brief phase when the entire surface of the moon is obscured--

17
00:01:17,000 --> 00:01:20,000
will last about 12 minutes.

18
00:01:20,000 --> 00:01:25,000
For those on the West Coast, the eclipse will end at 6:45 in the morning.

19
00:01:25,000 --> 00:01:26,000
Sound: Whoosh.

20
00:01:26,000 --> 00:01:30,000
Jones: Later in April you can enjoy other ways of seeing the moon.
0:01:30.0,0:01:04.0
It pairs with the Pleiades and Venus on the 20th and 21st.

21
00:01:40,000 --> 00:01:41,000
Sound: Whoosh.

22
00:01:41,000 --> 00:01:49,000
Jones: Another sky treat this month is the Lyrid meteor shower, which peaks in the early morning of April 23.

23
00:01:49,000 --> 00:01:54,000
The constellation Lyra, the point in the sky where the meteors appear to radiate from,

24
00:01:54,000 --> 00:01:59,000
will be above the horizon before midnight and high overhead by dawn local time

25
00:01:59,000 --> 00:02:02,000

for Northern Hemisphere observers.

26
00:02:02,000 --> 00:02:07,000
You'll see more meteors when the radiant is higher: between 4 a.m. and dawn.

27
00:02:07,000 --> 00:02:10,000
Based on observations from the past two years,

28
00:02:10,000 --> 00:02:15,000
you can expect to see 15 to 20 meteors per hour. Perhaps more!

29
00:02:15,000 --> 00:02:22,000
Information about our solar system objects can be found at solarsystem dot nasa dot gov.

30
00:02:22,000 --> 00:02:27,000
And you can learn about all of NASA's missions at w w w dot nasa dot gov.