
NASA
THE SOLAR SYSTEM

1
00:00:03,990 --> 00:00:02,470
light year it's a measure of distance

2
00:00:06,389 --> 00:00:04,000
and it's pretty straightforward the

3
00:00:08,390 --> 00:00:06,399
distance light can travel in a year but

4
00:00:11,190 --> 00:00:08,400
light travels fast

5
00:00:14,230 --> 00:00:11,200
one light year is about 5.879

6
00:00:15,509 --> 00:00:14,240
trillion miles or 9.461 trillion

7
00:00:18,950 --> 00:00:15,519
kilometers

8
00:00:20,230 --> 00:00:18,960
inches to measure distance why do we

9
00:00:23,670 --> 00:00:20,240
need light years

10
00:00:25,189 --> 00:00:23,680
well space is big like really big

11
00:00:27,070 --> 00:00:25,199
the nearest star to our solar system

12
00:00:30,310 --> 00:00:27,080
proxima centauri is about

13
00:00:33,190 --> 00:00:30,320

4.2465 light years away or 25 trillion

14
00:00:35,030 --> 00:00:33,200
miles and that's a close star so when we

15
00:00:37,030 --> 00:00:35,040
start talking about longer distances

16
00:00:40,630 --> 00:00:37,040
like to other galaxies we need bigger

17
00:00:43,110 --> 00:00:40,640
units of distance q light years

18
00:00:44,549 --> 00:00:43,120
and by the way it's not just light years

19
00:00:45,990 --> 00:00:44,559
there are also light seconds the

20
00:00:47,910 --> 00:00:46,000
distance light can travel in a second

21
00:00:49,110 --> 00:00:47,920
and light minutes how far light travels

22
00:00:51,110 --> 00:00:49,120
in a minute

23
00:00:52,709 --> 00:00:51,120
in fact our sun is about eight light

24
00:00:54,869 --> 00:00:52,719
minutes away from earth which means the

25
00:00:57,029 --> 00:00:54,879
sunlight you can see right now left the