



SPACE TO GROUND

1
00:00:04,789 --> 00:00:02,950
houston station on space to ground

2
00:00:06,309 --> 00:00:04,799
welcome to space to ground your weekly

3
00:00:07,990 --> 00:00:06,319
look at what's happening on board the

4
00:00:10,870 --> 00:00:08,000
international space station i'm dan

5
00:00:12,789 --> 00:00:10,880
hewitt spacex is flying high this week

6
00:00:15,030 --> 00:00:12,799
as they launched their sixth resupply

7
00:00:16,950 --> 00:00:15,040
mission to the station the dragon

8
00:00:18,950 --> 00:00:16,960
spacecraft took off from cape canaveral

9
00:00:20,950 --> 00:00:18,960
on tuesday packed with more than two

10
00:00:23,109 --> 00:00:20,960
tons of equipment and supplies the

11
00:00:24,630 --> 00:00:23,119
vehicle arrived at the station on friday

12
00:00:26,150 --> 00:00:24,640
where it was captured by the station's

13
00:00:27,910 --> 00:00:26,160

robotic arm

14

00:00:30,070 --> 00:00:27,920

one of the new studies packed away

15

00:00:33,030 --> 00:00:30,080

inside dragon is making new strides to

16

00:00:35,430 --> 00:00:33,040

keep bones healthy and strong osteo 4

17

00:00:37,750 --> 00:00:35,440

studies osteocytes the most abundant

18

00:00:39,990 --> 00:00:37,760

cells in the human skeleton to see how

19

00:00:42,229 --> 00:00:40,000

they respond to mechanical forces think

20

00:00:44,069 --> 00:00:42,239

weight lifting when these cells sense

21

00:00:46,790 --> 00:00:44,079

force they can trigger biological

22

00:00:48,389 --> 00:00:46,800

responses signaling other cells to make

23

00:00:50,150 --> 00:00:48,399

or remove bone

24

00:00:52,549 --> 00:00:50,160

researching this could help preserve

25

00:00:55,110 --> 00:00:52,559

bone health for space fliers and assist

26
00:00:57,110 --> 00:00:55,120
people on earth affected by osteoporosis

27
00:00:59,110 --> 00:00:57,120
or even bone fractures

28
00:01:00,709 --> 00:00:59,120
dragon also made a special delivery

29
00:01:02,869 --> 00:01:00,719
that's going to make life a little more

30
00:01:05,189 --> 00:01:02,879
enjoyable for the astronauts

31
00:01:07,270 --> 00:01:05,199
the espresso machine will allow the

32
00:01:09,910 --> 00:01:07,280
station residents to make fresh coffee

33
00:01:11,510 --> 00:01:09,920
tea and other hot beverages and they'll

34
00:01:13,670 --> 00:01:11,520
enjoy those drinks and specially

35
00:01:17,190 --> 00:01:13,680
designed space cups invented with the

36
00:01:19,270 --> 00:01:17,200
help of nasa astronaut don pettit

37
00:01:21,590 --> 00:01:19,280
and the more water i drink the more

38
00:01:24,710 --> 00:01:21,600

water that gets conducted up this open

39

00:01:27,350 --> 00:01:24,720

channel and parks itself near the lip

40

00:01:29,270 --> 00:01:27,360

twitter user at abe hutton wants to know

41

00:01:31,670 --> 00:01:29,280

what happens to the wastewater on the

42

00:01:33,670 --> 00:01:31,680

station well remember that coffee we

43

00:01:35,670 --> 00:01:33,680

were just talking about

44

00:01:37,990 --> 00:01:35,680

here onboard the iss we turned

45

00:01:38,950 --> 00:01:38,000

yesterday's coffee into tomorrow's

46

00:01:41,190 --> 00:01:38,960

coffee

47

00:01:43,670 --> 00:01:41,200

the station has one of the most complex

48

00:01:45,830 --> 00:01:43,680

water recycling systems ever designed

49

00:01:48,870 --> 00:01:45,840

able to collect and reuse a majority of

50

00:01:51,510 --> 00:01:48,880

waste water including sweat condensation

51
00:01:53,030 --> 00:01:51,520
and urine this incredible technology

52
00:01:55,270 --> 00:01:53,040
will be vital for missions to

53
00:01:57,109 --> 00:01:55,280
destinations like mars and is even

54
00:01:58,389 --> 00:01:57,119
helping to get clean drinking water to

55
00:02:00,149 --> 00:01:58,399
people on earth

56
00:02:02,389 --> 00:02:00,159
make sure to keep sending your questions