



1  
00:00:00,210 --> 00:00:02,270  
HI, I■ CADY COLEMAN,  
NASA ASTRONAUT EXPEDITION 27.

2  
00:00:03,720 --> 00:00:05,360  
- THIS IS MY CREW MATE...  
- PAOLO NESPOLI.

3  
00:00:06,750 --> 00:00:08,660  
WE■E HERE TO DO SOME  
SCIENCE EXPERIMENTS TODAY

4  
00:00:08,750 --> 00:00:10,390  
FOR THE KIDS IN MICRO-G  
AND SPECIFICALLY

5  
00:00:12,210 --> 00:00:13,840  
FOR SOME REALLY INTERESTING  
SIXTH GRADERS

6  
00:00:15,120 --> 00:00:17,150  
AT POTLATCH ELEMENTARY SCHOOL  
IN POTLATCH, IDAHO.

7  
00:00:18,630 --> 00:00:20,780  
AND TODAY■ EXPERIMENT IS CALLED  
PEPPER OIL SURPRISE.

8  
00:00:23,330 --> 00:00:25,120  
SO OUR JOB IS TO LOOK AT  
WHAT HAPPENS TO THINGS

9  
00:00:28,210 --> 00:00:29,570  
THAT DON■ MIX  
ON THE GROUND AND SEE

10  
00:00:30,510 --> 00:00:32,660  
WHETHER THEY MIX UP IN SPACE  
OR HOW THEY BEHAVE IN SPACE.

11  
00:00:32,840 --> 00:00:34,780  
AND SO THE STUDENTS AT POTLATCH  
TOOK OIL AND WATER

12  
00:00:36,030 --> 00:00:37,030  
AND PUT THEM EACH IN A BAG

13  
00:00:38,390 --> 00:00:40,660  
AND WHAT THEY FOUND WAS THAT  
THE OIL AND THE WATER SEPARATED

14  
00:00:41,870 --> 00:00:43,270  
AFTER JUST A SMALL  
AMOUNT OF TIME.

15  
00:00:45,330 --> 00:00:47,600  
AND WHAT WE■E GONNA DO IS SEE  
WHAT HAPPENS UP HERE IN SPACE.

16  
00:00:48,720 --> 00:00:50,360  
SO THE FIRST THING IS  
TO BE ABLE TO COLLECT

17  
00:00:50,390 --> 00:00:52,090  
OUR 15 MILS OF WATER  
THAT WE NEED IN OUR BAG.

18  
00:00:55,270 --> 00:00:56,420  
I■ GONNA GO AHEAD AND JUST USE

19  
00:00:59,270 --> 00:01:03,210  
AN APPROXIMATE AMOUNT  
OF WATER HERE.

20  
00:01:07,660 --> 00:01:08,660  
RIGHT ABOUT THERE.

21  
00:01:10,360 --> 00:01:13,870  
OKAY.

22

00:01:20,030 --> 00:01:21,030

SO HERE ■ OUR WATER.

23

00:01:22,030 --> 00:01:23,660

SO ■ WE GOT ANOTHER SYRINGE  
AND WANT 5 MILS,

24

00:01:24,270 --> 00:01:26,180

WHICH IS GONNA BE HALF WAY  
ON THIS SYRINGE HERE--

25

00:01:26,390 --> 00:01:27,690

2, 4, 5--  
AND THE BAG OF PEPPER OIL.

26

00:01:32,180 --> 00:01:33,390

AND NOW IT IS GONNA GO  
IN OUR BAG.

27

00:01:35,150 --> 00:01:38,660

READY?

28

00:01:47,780 --> 00:01:48,780

HERE WE GO.

29

00:01:49,390 --> 00:01:50,540

NOW, ACCORDING TO PROCEDURE,

30

00:01:52,330 --> 00:01:56,300

WE ■ WE GONNA SHAKE THIS  
FOR 15 SECONDS.

31

00:02:03,540 --> 00:02:04,600

NOW, ON THE EARTH, I THINK--

32

00:02:05,420 --> 00:02:06,810

I HAVE TO LOOK BACK  
AT THE PROCEDURE,

33

00:02:06,810 --> 00:02:08,450  
BUT I THINK IT TOOK ABOUT  
45 SECONDS OR SO.

34

00:02:09,630 --> 00:02:11,000  
WE'LL SEE  
HOW LONG IT TOOK THEIRS

35

00:02:12,450 --> 00:02:14,630  
ON THE EARTH BACK IN IDAHO  
AT POTLATCH ELEMENTARY SCHOOL

36

00:02:16,030 --> 00:02:17,030  
TO SEPARATE.

37

00:02:17,870 --> 00:02:21,750  
BUT THIS, THIS JUST DOESN'T SEEM  
TO BE CHANGING.

38

00:02:30,120 --> 00:02:31,600  
SO THE OIL AND THE WATER  
GO TO ONE SIDE--

39

00:02:33,090 --> 00:02:34,090  
OR GO TO ALL THE SIDES

40

00:02:34,390 --> 00:02:37,390  
BECAUSE THEY'RE JUST  
SEPARATING OUT.

41

00:02:41,030 --> 00:02:42,059  
SO LET'S BRING IT UP  
TO THE LIGHT

42

00:02:42,060 --> 00:02:45,030  
AND SEE IF IT LOOKS  
ANY DIFFERENT.

43

00:02:48,390 --> 00:02:49,480  
SO NO MATTER WHAT I DO UP HERE,

44

00:02:50,570 --> 00:02:52,300  
I CAN SEEM TO QUITE GET THESE  
TO SEPARATE.

45

00:02:53,390 --> 00:02:55,180  
SO PRETTY DIFFERENT  
THAN DOWN ON THE GROUND.

46

00:02:57,540 --> 00:02:58,540  
DOWN ON THE GROUND,

47

00:02:59,450 --> 00:03:01,510  
WE KNOW THAT OIL AND WATER  
WOULD SEPARATE RIGHT AWAY.

48

00:03:02,420 --> 00:03:04,270  
BUT UP HERE IN SPACE,  
THEY ARE REALLY TOGETHER.

49

00:03:07,510 --> 00:03:09,750  
AND UNDERSTANDING HOW THINGS  
SEPARATE OR DON'T SEPARATE

50

00:03:11,570 --> 00:03:13,059  
IS REALLY IMPORTANT  
FOR A LOT PROCESSES

51

00:03:13,060 --> 00:03:14,060  
DOWN ON THE EARTH.

52

00:03:15,570 --> 00:03:17,690  
SO THIS WAS REALLY FUN FOR US  
HERE ON THE SPACE STATION.

53

00:03:19,450 --> 00:03:21,150  
PAOLO AND I LIKED  
COLLECTING THE SUPPLIES

54

00:03:21,150 --> 00:03:22,150

THAT THE KIDS CAME UP WITH.

55

00:03:24,120 --> 00:03:25,630

FROM THE INTERNATIONAL  
SPACE STATION,

56

00:03:26,210 --> 00:03:27,510

I ■ LIKE TO SAY

THANK YOU VERY MUCH

57

00:03:28,330 --> 00:03:30,060

TO THE KIDS

AT POTLATCH ELEMENTARY SCHOOL.

58

00:03:30,480 --> 00:03:32,479

I THOUGHT YOUR EXPERIMENT  
WAS GREAT AND INTERESTING.

59

00:03:32,480 --> 00:03:34,210

IT MADE ME THINK A LOT,  
AND I ENJOYED DOING IT