

STEMonstrations



FIVE SENSES

1
00:00:30,470 --> 00:00:22,580

[Music]

2
00:00:34,229 --> 00:00:32,229

hello my name is shane kimbrough and i'm

3
00:00:36,389 --> 00:00:34,239

an astronaut living and working up here

4
00:00:37,990 --> 00:00:36,399

on the international space station

5
00:00:40,229 --> 00:00:38,000

in this demonstration i'll be talking

6
00:00:42,549 --> 00:00:40,239

about the five main senses we have and

7
00:00:46,709 --> 00:00:42,559

how we use them up here on the station

8
00:00:51,430 --> 00:00:49,029

as humans we have five senses that let

9
00:00:54,389 --> 00:00:51,440

us observe the world around us

10
00:00:56,549 --> 00:00:54,399

these senses are sight taste smell

11
00:00:58,790 --> 00:00:56,559

hearing and touch

12
00:01:01,430 --> 00:00:58,800

our senses help us determine whether or

13
00:01:03,910 --> 00:01:01,440

not we like something but they also warn

14

00:01:05,990 --> 00:01:03,920

us if something is wrong

15

00:01:07,830 --> 00:01:06,000

sometimes our senses pick up very good

16

00:01:11,510 --> 00:01:07,840

things like the smell of fresh baked

17

00:01:13,750 --> 00:01:11,520

cookies or the taste of yummy pizza

18

00:01:15,270 --> 00:01:13,760

other times our centers may warn us of

19

00:01:18,230 --> 00:01:15,280

danger like the smell of something

20

00:01:19,830 --> 00:01:18,240

burning or the feeling of something hot

21

00:01:22,310 --> 00:01:19,840

let's go through the five senses and

22

00:01:26,149 --> 00:01:22,320

talk about what we may observe with them

23

00:01:28,310 --> 00:01:26,159

up here on the station

24

00:01:31,910 --> 00:01:28,320

the sense of sight allows us to see the

25

00:01:33,590 --> 00:01:31,920

world around us or in my case space

26

00:01:35,350 --> 00:01:33,600

here on the station one way we use our

27

00:01:37,510 --> 00:01:35,360

sense of sight is to see different

28

00:01:40,630 --> 00:01:37,520

experiments we are working on so we can

29

00:01:42,310 --> 00:01:40,640

report the results back to earth some

30

00:01:43,670 --> 00:01:42,320

astronauts have noticed that their site

31

00:01:45,910 --> 00:01:43,680

changes a little after living in

32

00:01:47,749 --> 00:01:45,920

microgravity aboard the station

33

00:01:49,590 --> 00:01:47,759

scientists are helping to fix this by

34

00:01:51,710 --> 00:01:49,600

conducting research up here on

35

00:01:54,230 --> 00:01:51,720

astronauts like me

36

00:01:57,109 --> 00:01:54,240

[Music]

37

00:01:59,109 --> 00:01:57,119

our sense of taste comes from our tongue

38

00:02:00,630 --> 00:01:59,119

and it tells our brain what kind of food

39

00:02:01,590 --> 00:02:00,640

and nutrients we are putting into our

40

00:02:03,109 --> 00:02:01,600

body

41

00:02:06,389 --> 00:02:03,119

we can tell when something is super

42

00:02:07,910 --> 00:02:06,399

sweet or very salty because of this

43

00:02:10,229 --> 00:02:07,920

because of fluid shifts on a space

44

00:02:12,710 --> 00:02:10,239

station sometimes our noses can be a bit

45

00:02:13,910 --> 00:02:12,720

stuffy and it can be harder to taste

46

00:02:14,949 --> 00:02:13,920

food

47

00:02:17,350 --> 00:02:14,959

so

48

00:02:22,390 --> 00:02:17,360

lots of us love to add hot sauce to many

49

00:02:27,110 --> 00:02:25,190

smell just like with taste sometimes our

50

00:02:29,190 --> 00:02:27,120

sense of smell can change up here in

51
00:02:30,790 --> 00:02:29,200
microgravity as the liquids in our body

52
00:02:32,229 --> 00:02:30,800
move around

53
00:02:34,150 --> 00:02:32,239
once our bodies have adjusted to

54
00:02:38,550 --> 00:02:34,160
microgravity the space station has a

55
00:02:43,110 --> 00:02:40,869
hearing in terms of hearing inside the

56
00:02:45,030 --> 00:02:43,120
space station there is constant noise

57
00:02:47,670 --> 00:02:45,040
coming from the different machines that

58
00:02:48,869 --> 00:02:47,680
keep our air flowing and the experiments

59
00:02:50,550 --> 00:02:48,879
running

60
00:02:53,110 --> 00:02:50,560
our sleeping quarters block some of the

61
00:02:55,589 --> 00:02:53,120
noise though so we're able to get a good

62
00:02:57,030 --> 00:02:55,599
night's sleep each night

63
00:02:59,270 --> 00:02:57,040

what do you think you would hear outside

64

00:03:01,110 --> 00:02:59,280

the space station well you better be

65

00:03:03,589 --> 00:03:01,120

wearing a spacesuit so you'd be hearing

66

00:03:05,750 --> 00:03:03,599

the fan noises inside the spacesuit but

67

00:03:07,350 --> 00:03:05,760

if somehow you were able to be outside

68

00:03:09,910 --> 00:03:07,360

of that space suit you would hear

69

00:03:12,309 --> 00:03:09,920

absolutely nothing because sound cannot

70

00:03:13,220 --> 00:03:12,319

travel in space because it has no air to

71

00:03:14,790 --> 00:03:13,230

travel through

72

00:03:16,550 --> 00:03:14,800

[Music]

73

00:03:18,630 --> 00:03:16,560

touch usually when you think of touch

74

00:03:20,869 --> 00:03:18,640

you think of observing how things feel

75

00:03:22,630 --> 00:03:20,879

with your fingers since we are floating

76

00:03:24,869 --> 00:03:22,640

we are constantly having to touch and

77

00:03:27,270 --> 00:03:24,879

grab onto objects either using our hands

78

00:03:29,589 --> 00:03:27,280

or our feet you can use your feet to

79

00:03:31,430 --> 00:03:29,599

walk up here if you carefully hook them

80

00:03:33,110 --> 00:03:31,440

under hand rails as you go but this is

81

00:03:34,630 --> 00:03:33,120

pretty challenging so we like to use our

82

00:03:36,149 --> 00:03:34,640

hands more than our feet while we're up

83

00:03:37,750 --> 00:03:36,159

here

84

00:03:40,660 --> 00:03:37,760

we will often use our hands to move

85

00:03:46,710 --> 00:03:40,670

along and carry objects with our legs

86

00:03:50,630 --> 00:03:48,390

thanks for learning about the five main

87

00:03:52,949 --> 00:03:50,640

senses with me today start thinking

88

00:03:54,390 --> 00:03:52,959

about your five senses and how they help

89

00:03:56,309 --> 00:03:54,400

you observe and adapt to your

90

00:03:59,660 --> 00:03:56,319

environment down on earth

91

00:04:15,670 --> 00:03:59,670

see you next time