



GOLD AWARD

JAXA

1
00:00:08,070 --> 00:00:04,550
station this is houston on space ground

2
00:00:09,589 --> 00:00:08,080
two are you ready for the event

3
00:00:12,629 --> 00:00:09,599
for the event

4
00:00:13,990 --> 00:00:12,639
welcome aboard the international space

5
00:00:15,829 --> 00:00:14,000
station

6
00:00:21,429 --> 00:00:15,839
stennis space center this is houston

7
00:00:27,990 --> 00:00:23,590
station this is stennis space center can

8
00:00:31,429 --> 00:00:30,390
stannis space center we've got you loud

9
00:00:42,389 --> 00:00:31,439
and clear welcome aboard the

10
00:00:47,029 --> 00:00:44,950
hello my name is kenley from hancock

11
00:00:55,029 --> 00:00:47,039
north central elementary my question is

12
00:00:59,590 --> 00:00:56,869
i'm sorry can you say the question one

13
00:01:02,389 --> 00:00:59,600

more time

14

00:01:03,430 --> 00:01:02,399

observe the difference between mass and

15

00:01:07,910 --> 00:01:03,440

weight

16

00:01:12,469 --> 00:01:10,070

do we notice the difference between mass

17

00:01:13,429 --> 00:01:12,479

and and weight in space we do

18

00:01:15,109 --> 00:01:13,439

um

19

00:01:17,190 --> 00:01:15,119

in in space

20

00:01:19,109 --> 00:01:17,200

in order to get something moving you

21

00:01:21,190 --> 00:01:19,119

have to put some force in to get it

22

00:01:22,870 --> 00:01:21,200

moving but what happens is once it

23

00:01:25,350 --> 00:01:22,880

starts moving you have to put that same

24

00:01:27,109 --> 00:01:25,360

amount of force uh to stop it so when

25

00:01:29,109 --> 00:01:27,119

we're outside on a spacewalk and we have

26

00:01:31,190 --> 00:01:29,119

these big heavy suits on you know it

27

00:01:33,670 --> 00:01:31,200

takes some effort to get uh to get

28

00:01:35,270 --> 00:01:33,680

ourselves moving uh but then it takes

29

00:01:37,109 --> 00:01:35,280

the same amount of effort to stop as

30

00:01:38,710 --> 00:01:37,119

well so it's uh that's something a

31

00:01:45,030 --> 00:01:38,720

little bit different than we see on

32

00:01:49,429 --> 00:01:47,109

hello my name is anthony

33

00:01:51,749 --> 00:01:49,439

from bay williamson middle school and i

34

00:01:54,230 --> 00:01:51,759

have a question for mike

35

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

what are some difficulties you would

36

00:01:59,350 --> 00:01:57,119

experience in zero gravity

37

00:02:01,670 --> 00:01:59,360

without expecting before experiencing

38

00:02:03,190 --> 00:02:01,680

them for yourself

39

00:02:08,869 --> 00:02:03,200

i mean that you wouldn't expect before

40

00:02:13,589 --> 00:02:11,270

hey that's a great question i think for

41

00:02:16,710 --> 00:02:13,599

me the biggest surprise

42

00:02:18,229 --> 00:02:16,720

was how easy it is to lose things

43

00:02:19,510 --> 00:02:18,239

we've been up here for over two months

44

00:02:21,110 --> 00:02:19,520

almost two and a half months and we're

45

00:02:23,350 --> 00:02:21,120

still losing things and what's different

46

00:02:25,350 --> 00:02:23,360

is when you drop something on earth

47

00:02:27,110 --> 00:02:25,360

you look around your feet because you

48

00:02:29,030 --> 00:02:27,120

know that it falls to the floor it might

49

00:02:31,589 --> 00:02:29,040

roll into a corner or something but you

50

00:02:33,589 --> 00:02:31,599

know to start searching around your feet

51
00:02:36,790 --> 00:02:33,599
here when you drop something it can go

52
00:02:38,630 --> 00:02:36,800
in any direction

53
00:02:40,550 --> 00:02:38,640
and so it could go hide in a corner of

54
00:02:43,830 --> 00:02:40,560
the ceiling or the wall or somewhere

55
00:02:53,190 --> 00:02:43,840
else and so it it makes finding things

56
00:02:57,350 --> 00:02:55,830
hello my name is nathan from our lady of

57
00:03:00,470 --> 00:02:57,360
prom shopper school

58
00:03:02,470 --> 00:03:00,480
and my question is for satoshi

59
00:03:08,869 --> 00:03:02,480
how do you sleep in space with little

60
00:03:14,229 --> 00:03:11,910
okay we we sleep in uh normal sleeping

61
00:03:16,470 --> 00:03:14,239
bags in each crew quarter

62
00:03:23,110 --> 00:03:16,480
the crew quarter is about

63
00:03:24,949 --> 00:03:23,120

3.5 feet wide 3.5 feet long and 6.5 feet

64

00:03:26,630 --> 00:03:24,959

tall and

65

00:03:29,670 --> 00:03:26,640

we sleep well

66

00:03:31,750 --> 00:03:29,680

when i close my eyes uh in a

67

00:03:34,229 --> 00:03:31,760

free-floating sleeping bag under

68

00:03:35,830 --> 00:03:34,239

microgravity i have a strange feeling

69

00:03:38,229 --> 00:03:35,840

that i cannot

70

00:03:40,470 --> 00:03:38,239

recognize my body orientation with

71

00:03:43,110 --> 00:03:40,480

reference to the space station because

72

00:03:45,350 --> 00:03:43,120

nothing but a sleeping bag is touching

73

00:03:51,509 --> 00:03:45,360

my body

74

00:03:57,030 --> 00:03:54,229

um my name is valerie um

75

00:03:58,789 --> 00:03:57,040

from vancleaf middle school and my

76

00:04:00,949 --> 00:03:58,799

question is for ron

77

00:04:05,350 --> 00:04:00,959

um what do you do

78

00:04:06,710 --> 00:04:05,360

for entertainment or are you too busy

79

00:04:11,910 --> 00:04:06,720

just doing

80

00:04:15,270 --> 00:04:13,830

well valerie we are very busy up here

81

00:04:17,349 --> 00:04:15,280

but we we have to have time for

82

00:04:19,270 --> 00:04:17,359

relaxation and for fun too and and

83

00:04:20,789 --> 00:04:19,280

probably the best thing to do up here is

84

00:04:22,629 --> 00:04:20,799

to simply look out the window and look

85

00:04:24,550 --> 00:04:22,639

at the earth and you know we've been

86

00:04:26,469 --> 00:04:24,560

given this beautiful beautiful planet

87

00:04:28,550 --> 00:04:26,479

and it never gets boring to sit at the

88

00:04:30,230 --> 00:04:28,560

window or float out the window and and

89

00:04:32,310 --> 00:04:30,240

look at the earth go by it's just

90

00:04:33,830 --> 00:04:32,320

amazing whether it's in the you know in

91

00:04:34,950 --> 00:04:33,840

the day part of the orbit or the night

92

00:04:36,469 --> 00:04:34,960

part of the orbit there's always

93

00:04:38,710 --> 00:04:36,479

something spectacular to see whether

94

00:04:42,230 --> 00:04:38,720

it's lightning or or seeing shooting

95

00:04:43,830 --> 00:04:42,240

stars from above or or the auroras uh

96

00:04:45,430 --> 00:04:43,840

seeing the the continents and the

97

00:04:46,710 --> 00:04:45,440

mountains it's just it's just very very

98

00:04:48,710 --> 00:04:46,720

beautiful

99

00:04:50,950 --> 00:04:48,720

we also

100

00:04:53,189 --> 00:04:50,960

are able to communicate

101

00:04:55,590 --> 00:04:53,199

via things like twitter

102

00:04:57,510 --> 00:04:55,600

so we we do that for fun as well and and

103

00:04:59,670 --> 00:04:57,520

and use that to try and share this

104

00:05:01,270 --> 00:04:59,680

experience with everybody as best we can

105

00:05:03,830 --> 00:05:01,280

so those are some of the things that we

106

00:05:06,070 --> 00:05:03,840

do for fun up here and uh you know it's

107

00:05:08,230 --> 00:05:06,080

a wonderful place to live and work so

108

00:05:15,510 --> 00:05:08,240

uh and we got the greatest view in the

109

00:05:20,150 --> 00:05:17,990

hi i'm matt hello my name is bryce from

110

00:05:22,070 --> 00:05:20,160

blue river middle school and my question

111

00:05:24,550 --> 00:05:22,080

is for mike

112

00:05:32,390 --> 00:05:24,560

how does the stars on planets how do the

113

00:05:41,510 --> 00:05:33,990

was that how do the stars look from

114

00:05:46,710 --> 00:05:43,029

okay how do the stars and planets look

115

00:05:49,110 --> 00:05:46,720

from space you know amazing i i've grown

116

00:05:50,629 --> 00:05:49,120

up loving to go out and look at the

117

00:05:52,790 --> 00:05:50,639

night sky and look at the stars and

118

00:05:54,230 --> 00:05:52,800

where i grew up in south texas you

119

00:05:56,309 --> 00:05:54,240

couldn't see that many i mean you get

120

00:05:58,230 --> 00:05:56,319

out away from the the towns and cities

121

00:05:59,749 --> 00:05:58,240

and you can see more i remember the

122

00:06:02,230 --> 00:05:59,759

first time i looked at the stars from

123

00:06:05,110 --> 00:06:02,240

the mountains where it was clear skies

124

00:06:07,189 --> 00:06:05,120

clear night and how many more stars i

125

00:06:09,510 --> 00:06:07,199

could see it's a big jump a big change

126
00:06:11,350 --> 00:06:09,520
well up here it's the same kind of even

127
00:06:13,590 --> 00:06:11,360
bigger change from where it is on the

128
00:06:16,309 --> 00:06:13,600
tallest mountains to space where the

129
00:06:18,309 --> 00:06:16,319
stars are just innumerable and the big

130
00:06:20,469 --> 00:06:18,319
difference is they don't they don't

131
00:06:22,550 --> 00:06:20,479
twinkle they're steady and when you

132
00:06:24,390 --> 00:06:22,560
really look at them for a little while

133
00:06:25,830 --> 00:06:24,400
you can definitely see the colors

134
00:06:28,390 --> 00:06:25,840
particularly the red ones they have a

135
00:06:30,469 --> 00:06:28,400
little red tint that really stands out i

136
00:06:33,029 --> 00:06:30,479
love looking at the night sky in space

137
00:06:35,590 --> 00:06:33,039
too and the planets here

138
00:06:37,029 --> 00:06:35,600

look like just bigger brighter stars but

139

00:06:38,629 --> 00:06:37,039

you can track them as you're watching

140

00:06:40,309 --> 00:06:38,639

from night to night just like you can

141

00:06:41,990 --> 00:06:40,319

from home you can see you know

142

00:06:44,150 --> 00:06:42,000

particularly the ones that are in closer

143

00:06:45,909 --> 00:06:44,160

to us that their position changing

144

00:06:52,070 --> 00:06:45,919

relative to the stars that's a lot of

145

00:06:56,309 --> 00:06:54,150

hi my name is kaley from vancleaf middle

146

00:06:58,710 --> 00:06:56,319

school and my question is what is the

147

00:07:05,510 --> 00:06:58,720

most difficult thing to do while you are

148

00:07:11,510 --> 00:07:06,390

okay

149

00:07:15,990 --> 00:07:11,520

easy to do multiple somersaults under

150

00:07:18,710 --> 00:07:16,000

microgravity and it is difficult to

151
00:07:21,990 --> 00:07:18,720
land perfectly after that

152
00:07:28,150 --> 00:07:22,000
because due to the law of inertia it is

153
00:07:31,189 --> 00:07:30,469
stand by while he demonstrates

154
00:07:35,909 --> 00:07:31,199
sure

155
00:07:35,919 --> 00:07:47,830
we'll protect it

156
00:07:47,840 --> 00:07:55,909
see how difficult it is

157
00:08:00,869 --> 00:07:58,309
hello my name is morgan from hancock

158
00:08:03,189 --> 00:08:00,879
north central illinois school and my

159
00:08:05,189 --> 00:08:03,199
question is for ron how does the space

160
00:08:09,589 --> 00:08:05,199
station stay in orbit without falling

161
00:08:13,029 --> 00:08:11,189
well morgan that's a good question it

162
00:08:15,110 --> 00:08:13,039
actually is falling back to earth this

163
00:08:17,430 --> 00:08:15,120

whole big giant structure which weighs

164

00:08:19,110 --> 00:08:17,440

almost a million pounds is falling back

165

00:08:20,869 --> 00:08:19,120

to earth but the the reason why it

166

00:08:22,230 --> 00:08:20,879

doesn't hit the earth or the reason why

167

00:08:23,990 --> 00:08:22,240

it doesn't even get any closer to the

168

00:08:24,950 --> 00:08:24,000

earth is because we are traveling so

169

00:08:26,790 --> 00:08:24,960

fast

170

00:08:28,869 --> 00:08:26,800

that they're that the you know the earth

171

00:08:29,990 --> 00:08:28,879

curves away from us as we're going going

172

00:08:31,510 --> 00:08:30,000

by so

173

00:08:33,750 --> 00:08:31,520

uh you know we're traveling at five

174

00:08:36,469 --> 00:08:33,760

miles a second so that is really really

175

00:08:38,389 --> 00:08:36,479

fast so because of that velocity we

176

00:08:45,910 --> 00:08:38,399

never really get any closer to the earth

177

00:08:50,550 --> 00:08:48,389

hello my name is nathan from marley prom

178

00:08:53,269 --> 00:08:50,560

soccer school and my question is from

179

00:08:55,430 --> 00:08:53,279

mike how do you eat and drink in space

180

00:09:00,310 --> 00:08:55,440

shouldn't your foods just in drinks just

181

00:09:04,310 --> 00:09:02,070

hey nathan that's that's a good question

182

00:09:06,870 --> 00:09:04,320

you know it's not as hard as you think

183

00:09:09,590 --> 00:09:06,880

to to eat and drink in space and i think

184

00:09:11,829 --> 00:09:09,600

for this one you know we really ought to

185

00:09:18,710 --> 00:09:11,839

we really ought to get in close and and

186

00:09:22,550 --> 00:09:21,030

okay and we're gonna we're gonna we're

187

00:09:24,710 --> 00:09:22,560

going to just show you how you can eat

188

00:09:30,550 --> 00:09:24,720

in space here okay stand by keep

189

00:09:30,560 --> 00:09:40,470

here we go

190

00:09:40,480 --> 00:09:45,670

okay that's

191

00:09:50,389 --> 00:09:47,350

sorry

192

00:09:53,829 --> 00:09:50,399

all right

193

00:09:56,150 --> 00:09:53,839

now drinking in space is different

194

00:09:58,230 --> 00:09:56,160

because we we can't drink out of a cup

195

00:10:00,550 --> 00:09:58,240

it would just float out of the cup

196

00:10:01,590 --> 00:10:00,560

and so all of our drinks are in bags

197

00:10:03,110 --> 00:10:01,600

like this

198

00:10:04,710 --> 00:10:03,120

which kind of takes some of the joy out

199

00:10:06,069 --> 00:10:04,720

of a morning cup of coffee until you get

200

00:10:08,069 --> 00:10:06,079

used to it

201
00:10:10,550 --> 00:10:08,079
but you can have even things like orange

202
00:10:12,389 --> 00:10:10,560
juice right here inside this pouch and

203
00:10:14,150 --> 00:10:12,399
i'm going to demonstrate you know what

204
00:10:15,509 --> 00:10:14,160
happens to liquids in zero g and i'm

205
00:10:25,750 --> 00:10:15,519
going to hand over the microphone while

206
00:10:30,310 --> 00:10:28,389
okay so mike is squeezing the the bag

207
00:10:32,230 --> 00:10:30,320
that's filled with orange juice

208
00:10:34,069 --> 00:10:32,240
and you see that there's a bubble coming

209
00:10:36,150 --> 00:10:34,079
out of the top of the straw and there's

210
00:10:37,670 --> 00:10:36,160
something called surface tension that

211
00:10:41,190 --> 00:10:37,680
causes it to

212
00:10:43,670 --> 00:10:41,200
form an almost perfect sphere and if

213
00:10:45,829 --> 00:10:43,680

if he's good which i know he is

214

00:10:47,430 --> 00:10:45,839

he'll be able to drink that entire

215

00:10:48,310 --> 00:10:47,440

bubble of orange juice without making a

216

00:10:50,310 --> 00:10:48,320

mess

217

00:10:53,509 --> 00:10:50,320

there's no strings attached anywhere on

218

00:10:55,110 --> 00:10:53,519

the bubble of orange juice apparently

219

00:10:56,949 --> 00:10:55,120

all right how about a big round of

220

00:11:06,230 --> 00:10:56,959

applause for

221

00:11:09,829 --> 00:11:07,750

hello my name is samantha locke from

222

00:11:12,069 --> 00:11:09,839

vancleve middle school and my question

223

00:11:14,389 --> 00:11:12,079

is from mr satoshi

224

00:11:21,030 --> 00:11:14,399

what is it what season is it mostly like

225

00:11:26,389 --> 00:11:24,710

okay it is like spring or autumn

226

00:11:29,910 --> 00:11:26,399

because the temperature inside of the

227

00:11:32,230 --> 00:11:29,920

state station is controlled to about 70

228

00:11:34,630 --> 00:11:32,240

degrees all the time

229

00:11:37,110 --> 00:11:34,640

and it is of course comfortable

230

00:11:39,670 --> 00:11:37,120

and on the other hand i miss the sense

231

00:11:42,389 --> 00:11:39,680

of the uh of the seasons

232

00:11:52,790 --> 00:11:42,399

and i miss summer because i live in a

233

00:11:56,389 --> 00:11:54,710

hello my name is ethan from our lady

234

00:11:57,829 --> 00:11:56,399

palm soccer school and my question is

235

00:11:59,750 --> 00:11:57,839

for ron

236

00:12:02,150 --> 00:11:59,760

have you ever thrown a football in space

237

00:12:07,269 --> 00:12:02,160

and how does the lack of effects from

238

00:12:10,790 --> 00:12:09,269

well ethan i have thrown a football in

239

00:12:12,470 --> 00:12:10,800

space and

240

00:12:14,629 --> 00:12:12,480

you know you don't realize it but your

241

00:12:16,949 --> 00:12:14,639

brain has learned to compensate for

242

00:12:19,030 --> 00:12:16,959

gravity so when you throw a football

243

00:12:21,190 --> 00:12:19,040

your brain knows i can't just throw it

244

00:12:23,030 --> 00:12:21,200

in a straight line that i have to throw

245

00:12:24,710 --> 00:12:23,040

it a little bit higher so that when the

246

00:12:26,069 --> 00:12:24,720

gravity takes you know when it starts to

247

00:12:27,670 --> 00:12:26,079

the gravity starts to react on the

248

00:12:28,949 --> 00:12:27,680

football it's going to eventually hit

249

00:12:30,710 --> 00:12:28,959

the target you take

250

00:12:33,030 --> 00:12:30,720

your brain subconsciously takes that

251
00:12:35,430 --> 00:12:33,040
into account so the first time i threw a

252
00:12:37,030 --> 00:12:35,440
football in space it went really really

253
00:12:39,590 --> 00:12:37,040
high because

254
00:12:41,509 --> 00:12:39,600
my brain still thought i i needed to

255
00:12:43,110 --> 00:12:41,519
compensate for gravity which it didn't

256
00:12:45,829 --> 00:12:43,120
but it takes you a while to get used to

257
00:12:47,829 --> 00:12:45,839
it but you could basically you just

258
00:12:49,350 --> 00:12:47,839
throw directly at what you're what

259
00:12:50,710 --> 00:12:49,360
you're looking at what you're aiming for

260
00:12:52,949 --> 00:12:50,720
and it goes right there on a straight

261
00:12:54,870 --> 00:12:52,959
line without any without any problems

262
00:12:55,750 --> 00:12:54,880
whatsoever so it's it's a lot of fun to

263
00:13:03,030 --> 00:12:55,760

play with

264

00:13:07,990 --> 00:13:05,350

hello my name is garrett from bay waver

265

00:13:15,509 --> 00:13:08,000

middle school my question is for mike is

266

00:13:18,069 --> 00:13:16,790

hey garrett

267

00:13:20,150 --> 00:13:18,079

great question

268

00:13:21,350 --> 00:13:20,160

is it hard to adjust to zero gravity you

269

00:13:23,110 --> 00:13:21,360

know it takes a little bit of an

270

00:13:24,790 --> 00:13:23,120

adjustment as you figure out how to how

271

00:13:26,470 --> 00:13:24,800

to live and work up here because like

272

00:13:29,350 --> 00:13:26,480

we've said in so many ways it doesn't

273

00:13:31,030 --> 00:13:29,360

work the same uh your food does swell i

274

00:13:32,790 --> 00:13:31,040

mean when you swallow it goes down just

275

00:13:35,350 --> 00:13:32,800

like you can stand on your head right

276

00:13:37,750 --> 00:13:35,360

now and drink water through a straw and

277

00:13:39,590 --> 00:13:37,760

you could swallow it up where it goes up

278

00:13:40,790 --> 00:13:39,600

into your stomach

279

00:13:42,230 --> 00:13:40,800

at first

280

00:13:44,230 --> 00:13:42,240

probably one of the things everybody

281

00:13:46,790 --> 00:13:44,240

notices is a fluid shift because on

282

00:13:49,189 --> 00:13:46,800

earth gravity is pulling down on your

283

00:13:51,829 --> 00:13:49,199

blood and other fluids and organs in

284

00:13:54,230 --> 00:13:51,839

your body and it's pulling them down

285

00:13:57,030 --> 00:13:54,240

and up here without that gravity pulling

286

00:13:59,110 --> 00:13:57,040

the fluid down it just floats back up

287

00:14:01,189 --> 00:13:59,120

and it kind of feels like your head is

288

00:14:02,470 --> 00:14:01,199

full and has some pressure just like if

289

00:14:05,189 --> 00:14:02,480

you were hanging

290

00:14:07,269 --> 00:14:05,199

by your knees from a from a chin up bar

291

00:14:09,110 --> 00:14:07,279

or a tree branch hanging upside down and

292

00:14:11,030 --> 00:14:09,120

you feel that blood coming to your head

293

00:14:12,310 --> 00:14:11,040

and your kind of head starts to pound a

294

00:14:13,509 --> 00:14:12,320

little bit and your eyes feel like

295

00:14:16,389 --> 00:14:13,519

they're bulging a little bit because

296

00:14:18,629 --> 00:14:16,399

they really are and we feel that up here

297

00:14:20,230 --> 00:14:18,639

for you know a week or two

298

00:14:28,310 --> 00:14:20,240

when we first get up here until our

299

00:14:33,430 --> 00:14:31,189

hi my name is grace and i am from

300

00:14:39,829 --> 00:14:33,440

hancock north central elementary and my

301

00:14:45,189 --> 00:14:41,189

what is it like

302

00:14:52,389 --> 00:14:45,199

living with a crew from other countries

303

00:14:56,870 --> 00:14:54,389

that's a great question

304

00:14:59,189 --> 00:14:56,880

it is fun to live and work with crew

305

00:15:02,629 --> 00:14:59,199

members from different countries

306

00:15:05,269 --> 00:15:02,639

we learn russian language and russian

307

00:15:06,949 --> 00:15:05,279

colleagues and i learn english

308

00:15:09,430 --> 00:15:06,959

and the crew members

309

00:15:10,710 --> 00:15:09,440

sometimes talk in english and sometimes

310

00:15:13,670 --> 00:15:10,720

in russian

311

00:15:16,389 --> 00:15:13,680

and learning a foreign language is very

312

00:15:18,550 --> 00:15:16,399

interesting because you learn not only

313

00:15:29,269 --> 00:15:18,560

the language but also different culture

314

00:15:33,269 --> 00:15:31,430

hello my name is ashlynn from hancock

315

00:15:35,749 --> 00:15:33,279

north central elementary school and my

316

00:15:37,110 --> 00:15:35,759

question is for ron

317

00:15:39,269 --> 00:15:37,120

do you ever

318

00:15:46,389 --> 00:15:39,279

do you feel like you're falling when

319

00:15:50,710 --> 00:15:49,110

well ashley um you really don't

320

00:15:52,629 --> 00:15:50,720

at least at least i didn't i didn't feel

321

00:15:54,710 --> 00:15:52,639

like i was fallen because you're that

322

00:15:56,470 --> 00:15:54,720

you know the space station is this big

323

00:15:58,310 --> 00:15:56,480

giant structure

324

00:16:00,230 --> 00:15:58,320

and as far as you can tell it's not

325

00:16:01,590 --> 00:16:00,240

moving i mean you see the earth moving

326

00:16:02,949 --> 00:16:01,600

uh below you

327

00:16:05,030 --> 00:16:02,959

uh but

328

00:16:06,949 --> 00:16:05,040

you in relation to the to the space

329

00:16:08,629 --> 00:16:06,959

station there's really no emotion the

330

00:16:10,949 --> 00:16:08,639

only motion is the motion that you put

331

00:16:13,910 --> 00:16:10,959

in by by going from one place to the

332

00:16:15,829 --> 00:16:13,920

other so you get this feeling that the

333

00:16:17,509 --> 00:16:15,839

space station is staying right where it

334

00:16:19,430 --> 00:16:17,519

is and everything else around you is

335

00:16:21,350 --> 00:16:19,440

moving so it's a it's a really

336

00:16:23,430 --> 00:16:21,360

interesting sensation

337

00:16:25,430 --> 00:16:23,440

but the the other thing that really kind

338

00:16:27,189 --> 00:16:25,440

of takes over everything is this

339

00:16:29,430 --> 00:16:27,199

unbelievable view that you have of the

340

00:16:31,829 --> 00:16:29,440

earth as it's going by at five miles a

341

00:16:33,990 --> 00:16:31,839

second uh and you know occasionally when

342

00:16:35,430 --> 00:16:34,000

you get the opportunity to look down and

343

00:16:38,069 --> 00:16:35,440

take in what you're seeing it's really

344

00:16:40,470 --> 00:16:38,079

spectacular and so uh you know i never

345

00:16:42,949 --> 00:16:40,480

never had the sensation of falling uh

346

00:16:48,150 --> 00:16:42,959

just had the sensation of uh you know

347

00:16:48,160 --> 00:16:54,870

mike says he never looks down

348

00:16:58,629 --> 00:16:56,550

hello my name is robert from bay

349

00:17:01,030 --> 00:16:58,639

wavelength middle school and my question

350

00:17:09,669 --> 00:17:01,040

is for mike does the whole moon ever get

351
00:17:13,429 --> 00:17:11,590
is that the does the moon ever get dark

352
00:17:15,750 --> 00:17:13,439
when looking at it from the iss i think

353
00:17:17,909 --> 00:17:15,760
the the moon really looks the same up

354
00:17:20,069 --> 00:17:17,919
here as it does from earth

355
00:17:22,150 --> 00:17:20,079
you know i talked about light enjoying

356
00:17:23,990 --> 00:17:22,160
looking at the night sky i really love

357
00:17:25,909 --> 00:17:24,000
looking at the moon and i would spend

358
00:17:28,069 --> 00:17:25,919
time looking at the moon with binoculars

359
00:17:29,909 --> 00:17:28,079
from my home and studying the different

360
00:17:32,549 --> 00:17:29,919
shadows that you can see each night as

361
00:17:34,470 --> 00:17:32,559
that line of light and darkness moves

362
00:17:35,990 --> 00:17:34,480
you could see different craters

363
00:17:37,750 --> 00:17:36,000

i really looked forward to seeing the

364

00:17:39,830 --> 00:17:37,760

moon the first time i was looking out of

365

00:17:41,590 --> 00:17:39,840

a window in space i couldn't wait to see

366

00:17:43,430 --> 00:17:41,600

the moon because we're closer right and

367

00:17:45,430 --> 00:17:43,440

then i was really disappointed

368

00:17:48,390 --> 00:17:45,440

because the moon looked the same and

369

00:17:50,710 --> 00:17:48,400

then i realized we were 200 miles

370

00:17:53,830 --> 00:17:50,720

further up in space about 200 miles up

371

00:17:55,110 --> 00:17:53,840

off the ground well the moon is 230 000

372

00:17:56,789 --> 00:17:55,120

miles away

373

00:17:58,470 --> 00:17:56,799

so we're only a tiny bit closer and the

374

00:18:04,870 --> 00:17:58,480

moon really looks a whole lot the same

375

00:18:09,110 --> 00:18:07,190

hello my name is austin from vancleave

376

00:18:10,549 --> 00:18:09,120

middle school and my question is for

377

00:18:12,630 --> 00:18:10,559

satoshi

378

00:18:18,710 --> 00:18:12,640

does it get hot whenever the sunlight

379

00:18:21,590 --> 00:18:19,669

yes

380

00:18:24,390 --> 00:18:21,600

the temperature of the surface

381

00:18:27,029 --> 00:18:24,400

temperature can become more than 210

382

00:18:28,390 --> 00:18:27,039

degrees fahrenheit when sun hits the

383

00:18:31,190 --> 00:18:28,400

space station

384

00:18:35,430 --> 00:18:31,200

and also it can be cold

385

00:18:37,909 --> 00:18:35,440

less than minus 150 degrees fahrenheit

386

00:18:39,990 --> 00:18:37,919

and the space station is well thermally

387

00:18:42,310 --> 00:18:40,000

controlled so that the inside of the

388

00:18:45,110 --> 00:18:42,320

space station temperature is controlled

389

00:18:53,510 --> 00:18:45,120

to 70 degrees fahrenheit all the time

390

00:18:57,190 --> 00:18:55,510

station this is stennis space center

391

00:18:58,870 --> 00:18:57,200

we're sorry we're running out of time we

392

00:19:01,350 --> 00:18:58,880

wish we could talk to you all day you've

393

00:19:03,669 --> 00:19:01,360

got a lot of excited students and

394

00:19:04,470 --> 00:19:03,679

teachers and administrators and others

395

00:19:07,029 --> 00:19:04,480

here

396

00:19:09,430 --> 00:19:07,039

and we just want to say thank you very

397

00:19:11,750 --> 00:19:09,440

much for giving us time out of your busy

398

00:19:13,590 --> 00:19:11,760

work schedule to talk with us and help

399

00:19:15,669 --> 00:19:13,600

us learn about what it's like in space

400

00:19:17,909 --> 00:19:15,679

and help us learn a lot about math

401
00:19:20,070 --> 00:19:17,919
science and why it's so important and we

402
00:19:22,390 --> 00:19:20,080
want to thank you and we wish you best

403
00:19:25,350 --> 00:19:22,400
of luck and godspeed on the rest of your

404
00:19:30,390 --> 00:19:25,360
expedition 28 journey thank you from the

405
00:19:30,400 --> 00:19:33,510
well

406
00:19:37,029 --> 00:19:35,510
thank you very very very much it was a

407
00:19:38,549 --> 00:19:37,039
great pleasure to speak with everybody

408
00:19:40,950 --> 00:19:38,559
today and

409
00:19:44,150 --> 00:19:40,960
we again want to encourage everybody to

410
00:19:47,029 --> 00:19:44,160
study hard study math study science

411
00:19:48,549 --> 00:19:47,039
technology it's a it's a wonderful tool

412
00:19:50,870 --> 00:19:48,559
to not only improve your life but

413
00:19:52,470 --> 00:19:50,880

improve the world so

414

00:19:53,909 --> 00:19:52,480

greetings to everybody at stennis it's a

415

00:19:57,029 --> 00:19:53,919

wonderful place we've been there many

416

00:19:58,789 --> 00:19:57,039

times and uh it was a really a

417

00:20:00,470 --> 00:19:58,799

great great fun to speak with everybody

418

00:20:22,149 --> 00:20:00,480

today so thanks for coming aboard the