



Welcome to Cygnus

JUST LOVETT.

LAB1P3

1
00:00:12,470 --> 00:00:07,829
hello lovet from the space station

2
00:00:17,830 --> 00:00:14,390
hear you just fine shane do you hear us

3
00:00:23,189 --> 00:00:19,670
hey billy great to talk to you and great

4
00:00:24,630 --> 00:00:23,199
to talk to the love at family today

5
00:00:26,150 --> 00:00:24,640
shane we have

6
00:00:28,630 --> 00:00:26,160
several hundred folks here in our

7
00:00:31,429 --> 00:00:28,640
hendrick chanel theater representing our

8
00:00:33,270 --> 00:00:31,439
student body our faculty our parent body

9
00:00:35,030 --> 00:00:33,280
our alumni body some of your old school

10
00:00:36,870 --> 00:00:35,040
mates are here representing our board of

11
00:00:39,030 --> 00:00:36,880
trustees we're so

12
00:00:40,790 --> 00:00:39,040
grateful to you for giving us this time

13
00:00:43,350 --> 00:00:40,800

and so grateful to you for your service

14

00:00:45,110 --> 00:00:43,360

to our country and to the world at large

15

00:00:47,029 --> 00:00:45,120

i'm going to start right away by

16

00:00:49,510 --> 00:00:47,039

introducing our first student with a

17

00:00:53,110 --> 00:00:49,520

question for you if that's okay

18

00:00:55,270 --> 00:00:53,120

he is uh nick becker he's a senior and

19

00:00:57,270 --> 00:00:55,280

like like you when you were a student

20

00:00:58,790 --> 00:00:57,280

here he's interested in flight and

21

00:01:00,630 --> 00:00:58,800

aeronautics

22

00:01:03,590 --> 00:01:00,640

and may well be on the same kind of

23

00:01:05,109 --> 00:01:03,600

journey you are today so nick becker has

24

00:01:06,469 --> 00:01:05,119

the first question for you shane but

25

00:01:11,750 --> 00:01:06,479

thank you for doing this for us and

26

00:01:16,390 --> 00:01:14,070

thanks billy

27

00:01:17,990 --> 00:01:16,400

hi mr kimbrough i was wondering what is

28

00:01:20,550 --> 00:01:18,000

your favorite experiment that you've

29

00:01:21,670 --> 00:01:20,560

done or planned to do on the iss and how

30

00:01:25,749 --> 00:01:21,680

does that compare to your shuttle

31

00:01:29,190 --> 00:01:27,429

well we have a lot more time up here on

32

00:01:30,630 --> 00:01:29,200

this mission compared to the shuttle

33

00:01:32,870 --> 00:01:30,640

mission so we'll do hundreds of

34

00:01:35,270 --> 00:01:32,880

experiments in my five to six months up

35

00:01:37,830 --> 00:01:35,280

here um so far i think my favorite one

36

00:01:40,789 --> 00:01:37,840

has been we got to i got to grow some

37

00:01:42,870 --> 00:01:40,799

plants up here so i grew some lettuce

38

00:01:44,789 --> 00:01:42,880

so i kind of felt like matt damon a bit

39

00:01:46,789 --> 00:01:44,799

in the martian but we grew some plants

40

00:01:48,069 --> 00:01:46,799

we got to harvest them and we got to eat

41

00:01:49,910 --> 00:01:48,079

the lettuce while we were up here so

42

00:01:55,749 --> 00:01:49,920

that was a welcome treat to our normal

43

00:02:01,910 --> 00:01:58,630

hello my name is davis hayden

44

00:02:04,469 --> 00:02:01,920

what what was it like to orbit earth

45

00:02:09,430 --> 00:02:04,479

for two days before your soyu docked to

46

00:02:13,670 --> 00:02:11,510

yeah to me those were a long couple days

47

00:02:15,110 --> 00:02:13,680

we're in a very very tiny spacecraft

48

00:02:17,190 --> 00:02:15,120

developed by the russians called the

49

00:02:19,270 --> 00:02:17,200

soyuz like you mentioned and there's not

50

00:02:21,110 --> 00:02:19,280

a lot to do in there and your three

51

00:02:23,190 --> 00:02:21,120

people are in that tiny

52

00:02:24,790 --> 00:02:23,200

area for a couple days so we just kind

53

00:02:26,390 --> 00:02:24,800

of got acclimated to the space

54

00:02:27,430 --> 00:02:26,400

environment and microgravity a little

55

00:02:29,030 --> 00:02:27,440

bit

56

00:02:30,470 --> 00:02:29,040

but in general it was just a long two

57

00:02:32,390 --> 00:02:30,480

days before we got here to the space

58

00:02:37,990 --> 00:02:32,400

station

59

00:02:41,350 --> 00:02:39,750

my name is adam young

60

00:02:47,030 --> 00:02:41,360

where is your favorite place to hang out

61

00:02:52,070 --> 00:02:49,509

well this this entire complex is so

62

00:02:53,750 --> 00:02:52,080

unique and so cool but my favorite place

63

00:02:55,910 --> 00:02:53,760

and i think most astronauts favorite

64

00:02:57,270 --> 00:02:55,920

place is hanging out in a module called

65

00:02:59,190 --> 00:02:57,280

the cupola

66

00:03:00,949 --> 00:02:59,200

and it's just a module full of windows

67

00:03:03,350 --> 00:03:00,959

so if you get a chance to look it up

68

00:03:06,790 --> 00:03:03,360

online you'll see why it's our favorite

69

00:03:08,790 --> 00:03:06,800

so it's like a 360 degree window

70

00:03:10,550 --> 00:03:08,800

module it's a pretty small module but it

71

00:03:19,350 --> 00:03:10,560

looks down at earth all the time so we

72

00:03:23,589 --> 00:03:21,670

hello my name is montana dickerson how

73

00:03:28,070 --> 00:03:23,599

do you brush your teeth on

74

00:03:31,350 --> 00:03:29,509

all right get into the good basic

75

00:03:33,270 --> 00:03:31,360

questions now but these are good so we

76
00:03:34,949 --> 00:03:33,280
brush the brush our teeth the same way

77
00:03:36,789 --> 00:03:34,959
but we have a little problem that we

78
00:03:38,149 --> 00:03:36,799
don't have on earth so up here we don't

79
00:03:39,910 --> 00:03:38,159
have any sinks

80
00:03:40,789 --> 00:03:39,920
so you got a couple options you can

81
00:03:42,789 --> 00:03:40,799
either

82
00:03:44,630 --> 00:03:42,799
whatever's in your mouth you can spit it

83
00:03:46,789 --> 00:03:44,640
out into a napkin but that gets pretty

84
00:03:48,869 --> 00:03:46,799
messy up here so most folks

85
00:03:50,470 --> 00:03:48,879
including myself choose to just swallow

86
00:03:53,509 --> 00:03:50,480
it so i'll be looking forward to a sink

87
00:03:56,949 --> 00:03:53,519
here when i get back to earth

88
00:04:01,270 --> 00:03:59,350

hello my name is isabella moffitt is

89

00:04:06,070 --> 00:04:01,280

there a trash can on the space station

90

00:04:10,070 --> 00:04:07,990

so we have a lot of ways to collect our

91

00:04:11,830 --> 00:04:10,080

trash there's tomah pesquet

92

00:04:13,190 --> 00:04:11,840

franchise are not floating by one of my

93

00:04:14,390 --> 00:04:13,200

crewmates

94

00:04:16,310 --> 00:04:14,400

there's a lot of ways and we have to

95

00:04:17,990 --> 00:04:16,320

manage our trash very carefully because

96

00:04:19,909 --> 00:04:18,000

otherwise it's just a mess up here and

97

00:04:22,629 --> 00:04:19,919

things are all over the place

98

00:04:24,950 --> 00:04:22,639

so what we do in general is separate our

99

00:04:27,270 --> 00:04:24,960

dry and our wet trash so our dry trash

100

00:04:29,510 --> 00:04:27,280

meaning paper or maybe clothes things

101

00:04:31,830 --> 00:04:29,520

like that wet trash meaning anything

102

00:04:34,230 --> 00:04:31,840

that could smell in a week or a month or

103

00:04:35,510 --> 00:04:34,240

three months from now so food containers

104

00:04:38,310 --> 00:04:35,520

and things like that so we try to

105

00:04:40,710 --> 00:04:38,320

operate those um and keep those clean

106

00:04:42,710 --> 00:04:40,720

and then we put our trash in these cargo

107

00:04:44,310 --> 00:04:42,720

vehicles that come up every so often so

108

00:04:46,310 --> 00:04:44,320

we have a japanese cargo vehicle

109

00:04:48,310 --> 00:04:46,320

attached right now it's going to leave

110

00:04:50,550 --> 00:04:48,320

here at the end of january so before it

111

00:04:52,469 --> 00:04:50,560

leaves we're going to put all or all or

112

00:04:54,830 --> 00:04:52,479

whatever we can of our trash on board

113

00:04:59,670 --> 00:04:54,840

that vehicle to take it

114

00:05:08,710 --> 00:05:02,150

my name is caroline colavito how do you

115

00:05:12,790 --> 00:05:10,950

another tricky thing to do but uh what's

116

00:05:14,390 --> 00:05:12,800

kind of cool is when you just put water

117

00:05:15,909 --> 00:05:14,400

on your hair and you do it out of a

118

00:05:17,350 --> 00:05:15,919

drink bag and we'll talk about that here

119

00:05:19,270 --> 00:05:17,360

in a minute too but it comes in a bag

120

00:05:21,350 --> 00:05:19,280

like this and it's just water

121

00:05:23,029 --> 00:05:21,360

um so you just squirt it out onto your

122

00:05:25,029 --> 00:05:23,039

head and the cool thing is it doesn't go

123

00:05:27,830 --> 00:05:25,039

anywhere the surface tension allows it

124

00:05:29,990 --> 00:05:27,840

to stay on your head um so you can wash

125

00:05:31,350 --> 00:05:30,000

it that way we also have shampoo that we

126

00:05:33,270 --> 00:05:31,360

use it's a little different than the

127

00:05:35,510 --> 00:05:33,280

shampoo you use on earth so it's not so

128

00:05:37,430 --> 00:05:35,520

foamy and things don't go everywhere

129

00:05:39,189 --> 00:05:37,440

so we use that in a comb i use that in

130

00:05:41,189 --> 00:05:39,199

combination with some water to wash my

131

00:05:44,550 --> 00:05:41,199

hair every day

132

00:05:49,189 --> 00:05:47,110

hi my name is libby stewart and i was

133

00:05:53,909 --> 00:05:49,199

wondering if you experienced weather in

134

00:05:57,510 --> 00:05:55,830

so on the space station here we don't

135

00:05:58,950 --> 00:05:57,520

experience weather it's always pretty

136

00:06:01,110 --> 00:05:58,960

much the same temperature it's very

137

00:06:02,870 --> 00:06:01,120

comfortable about 72 degrees kind of

138

00:06:04,309 --> 00:06:02,880

like your school is or an office

139

00:06:06,150 --> 00:06:04,319

building would be

140

00:06:07,590 --> 00:06:06,160

and we can regulate it if we want up and

141

00:06:10,070 --> 00:06:07,600

down a little bit but in general it's

142

00:06:12,230 --> 00:06:10,080

very consistent uh we do from this

143

00:06:14,550 --> 00:06:12,240

vantage point though get to see weather

144

00:06:16,870 --> 00:06:14,560

on the earth we get to see from above

145

00:06:19,590 --> 00:06:16,880

thunderstorms and tropical storms and

146

00:06:21,430 --> 00:06:19,600

hurricanes and things like that really

147

00:06:23,029 --> 00:06:21,440

spectacular looking but we know the

148

00:06:24,710 --> 00:06:23,039

devastation a lot of those cause on

149

00:06:28,309 --> 00:06:24,720

earth

150

00:06:33,990 --> 00:06:30,469

hello i'm caroline williams and this is

151

00:06:35,909 --> 00:06:34,000

davis dundee we have two questions

152

00:06:41,110 --> 00:06:35,919

how do you take a shower in space and

153

00:06:44,790 --> 00:06:43,270

all right showering is very tough

154

00:06:46,550 --> 00:06:44,800

because we don't have showers a lot of

155

00:06:48,390 --> 00:06:46,560

people don't know that so

156

00:06:50,710 --> 00:06:48,400

we're pretty much going five six months

157

00:06:53,029 --> 00:06:50,720

without a real shower but what we do is

158

00:06:55,749 --> 00:06:53,039

we get a towel or a washcloth

159

00:06:57,749 --> 00:06:55,759

and you either wet it down

160

00:07:00,230 --> 00:06:57,759

by the the water bag like i mentioned

161

00:07:02,150 --> 00:07:00,240

before and then you put we have a kind

162

00:07:03,189 --> 00:07:02,160

of liquid soap that comes in a pouch

163

00:07:04,950 --> 00:07:03,199

like this

164

00:07:07,189 --> 00:07:04,960

so you also put that on your towel and

165

00:07:08,870 --> 00:07:07,199

then you just wipe your body down

166

00:07:11,189 --> 00:07:08,880

so you do that and then you'll wash your

167

00:07:13,029 --> 00:07:11,199

hair typically every day and we usually

168

00:07:15,029 --> 00:07:13,039

do it after we work out so we work out

169

00:07:17,270 --> 00:07:15,039

for about two to two and a half hours

170

00:07:18,790 --> 00:07:17,280

every day and we're pretty sweaty by the

171

00:07:21,990 --> 00:07:18,800

end of that so that's obviously a great

172

00:07:22,000 --> 00:07:25,830

thank you

173

00:07:35,189 --> 00:07:28,309

hi my name is ashna lol how do you sleep

174

00:07:39,110 --> 00:07:36,390

so i missed the first part of your

175

00:07:44,230 --> 00:07:39,120

question could you repeat that again

176

00:07:47,830 --> 00:07:46,309

all right how do you sleep in space um

177

00:07:49,830 --> 00:07:47,840

so we have sleeping bags and i brought

178

00:07:52,469 --> 00:07:49,840

mine out here to show everybody

179

00:07:53,589 --> 00:07:52,479

um so here's our sleeping bag and and we

180

00:07:56,070 --> 00:07:53,599

have a little

181

00:07:57,670 --> 00:07:56,080

closet i would call it uh closet shape

182

00:07:59,670 --> 00:07:57,680

that's our bedroom so we all have a kind

183

00:08:02,070 --> 00:07:59,680

of a private place we can go and you

184

00:08:03,909 --> 00:08:02,080

just attach this sleeping bag onto one

185

00:08:05,510 --> 00:08:03,919

of the walls and you can do it upside

186

00:08:08,070 --> 00:08:05,520

down right side up it doesn't matter

187

00:08:10,550 --> 00:08:08,080

because there's no up or down in space

188

00:08:12,230 --> 00:08:10,560

so whatever is more comfortable for you

189

00:08:13,670 --> 00:08:12,240

and also in there you have a laptop

190

00:08:15,749 --> 00:08:13,680

where you can do your email and things

191

00:08:18,230 --> 00:08:15,759

like that so it's kind of a nice private

192

00:08:22,070 --> 00:08:18,240

place to go to sleep and

193

00:08:26,869 --> 00:08:22,080

call home potentially or do emails

194

00:08:31,830 --> 00:08:29,110

hi i'm rex wilson and this is lainey

195

00:08:34,389 --> 00:08:31,840

mcdowell we have two questions for you

196

00:08:38,829 --> 00:08:34,399

what foods do you miss in space how does

197

00:08:42,870 --> 00:08:41,269

work all right so a good question on the

198

00:08:44,149 --> 00:08:42,880

salt shaker i happen to bring one for

199

00:08:47,030 --> 00:08:44,159

you so

200

00:08:48,710 --> 00:08:47,040

um everything up here like salt is

201
00:08:50,310 --> 00:08:48,720
actually in liquid form so we have

202
00:08:51,670 --> 00:08:50,320
liquid salt which comes in a little

203
00:08:53,350 --> 00:08:51,680
bottle like this

204
00:08:55,990 --> 00:08:53,360
and then you just open the cap and you

205
00:08:58,150 --> 00:08:56,000
just squirt the salt or whatever

206
00:09:00,230 --> 00:08:58,160
condiment that you like we have pretty

207
00:09:02,230 --> 00:09:00,240
much everything up here and you squirt

208
00:09:03,750 --> 00:09:02,240
that on your food and once you do that

209
00:09:04,949 --> 00:09:03,760
it'll stick to your food so that's a

210
00:09:06,710 --> 00:09:04,959
good thing

211
00:09:08,790 --> 00:09:06,720
and then you kind of mix it up with your

212
00:09:12,150 --> 00:09:08,800
spoon or fork and then eat it and i

213
00:09:12,160 --> 00:09:19,190

what foods do you miss in space

214

00:09:22,710 --> 00:09:20,710

i'm sorry it's not coming through clear

215

00:09:28,790 --> 00:09:22,720

up here for some reason

216

00:09:31,910 --> 00:09:31,030

what foods you miss okay thank you

217

00:09:33,670 --> 00:09:31,920

um

218

00:09:35,030 --> 00:09:33,680

well i do miss crunchy things because we

219

00:09:36,470 --> 00:09:35,040

don't have a lot of crunchy things so

220

00:09:38,710 --> 00:09:36,480

when we had that lettuce

221

00:09:40,630 --> 00:09:38,720

a few times up here that was really nice

222

00:09:42,790 --> 00:09:40,640

and i miss things like pizza which you

223

00:09:44,070 --> 00:09:42,800

guys probably like as well we don't have

224

00:09:47,030 --> 00:09:44,080

any of that up here but in general our

225

00:09:48,550 --> 00:09:47,040

food is very good pretty good variety

226

00:09:50,310 --> 00:09:48,560

we get to share with the russians a lot

227

00:09:51,910 --> 00:09:50,320

too so we'll have a lot of their cuisine

228

00:09:53,509 --> 00:09:51,920

and they'll have some of ours we're

229

00:09:55,350 --> 00:09:53,519

lucky to have the french astronaut on

230

00:09:57,670 --> 00:09:55,360

board so we get some european food as

231

00:09:57,680 --> 00:10:01,829

thank you

232

00:10:09,670 --> 00:10:04,230

hello my name is jack merritt how do you

233

00:10:13,350 --> 00:10:11,350

all right i'll try to show you here good

234

00:10:15,430 --> 00:10:13,360

question so what i got here this isn't

235

00:10:17,190 --> 00:10:15,440

water but it's any drink bag we have is

236

00:10:19,430 --> 00:10:17,200

like this this is an orange drink so

237

00:10:21,430 --> 00:10:19,440

it's labeled it just has powder in it

238

00:10:23,750 --> 00:10:21,440

until we hydrate it and put water in it

239

00:10:25,829 --> 00:10:23,760

but it then turns into kind of a giant

240

00:10:27,590 --> 00:10:25,839

capri sun pouch like you guys are

241

00:10:28,790 --> 00:10:27,600

probably used to we do have a special

242

00:10:31,829 --> 00:10:28,800

straw

243

00:10:33,829 --> 00:10:31,839

it the liquid would just come out all

244

00:10:35,509 --> 00:10:33,839

over the place so i'll try to show you

245

00:10:37,350 --> 00:10:35,519

what happens when you release the straw

246

00:10:38,630 --> 00:10:37,360

here

247

00:10:41,269 --> 00:10:38,640

so you can just see

248

00:10:42,550 --> 00:10:41,279

a ball of orange liquid here

249

00:10:47,750 --> 00:10:42,560

and it'll just keep coming out and

250

00:10:51,110 --> 00:10:49,110

but in general we just drew when we're

251
00:10:52,949 --> 00:10:51,120
doing our drinks you drink what you want

252
00:11:03,110 --> 00:10:52,959
and then you close the straw back up so

253
00:11:03,120 --> 00:11:07,430
thank you

254
00:11:07,440 --> 00:11:13,110
hi i got a little messier than i thought

255
00:11:13,120 --> 00:11:18,949
what do you like to do in your free time

256
00:11:22,550 --> 00:11:20,870
so we do get weekends off typically so

257
00:11:24,790 --> 00:11:22,560
we do have some free time

258
00:11:26,470 --> 00:11:24,800
i love calling my family and friends

259
00:11:28,790 --> 00:11:26,480
back on earth and chatting with them and

260
00:11:30,150 --> 00:11:28,800
catching up so that's always nice we

261
00:11:32,230 --> 00:11:30,160
also have

262
00:11:33,750 --> 00:11:32,240
plenty of movies plenty of tv shows that

263
00:11:36,069 --> 00:11:33,760

they can send up to us or that are

264

00:11:37,590 --> 00:11:36,079

already on board the space station so a

265

00:11:38,630 --> 00:11:37,600

lot of times we'll have movie night up

266

00:11:40,550 --> 00:11:38,640

here and we'll get the whole crew

267

00:11:43,509 --> 00:11:40,560

together and watch a nice movie together

268

00:11:45,269 --> 00:11:43,519

i'm also a big sports fan so i get a

269

00:11:48,389 --> 00:11:45,279

pretty good game sent up to me whether

270

00:11:50,389 --> 00:11:48,399

it's college football or nfl or nba or

271

00:11:52,310 --> 00:11:50,399

college basketball so i enjoy watching

272

00:11:54,550 --> 00:11:52,320

those it kind of keeps me in touch with

273

00:11:58,629 --> 00:11:54,560

things on earth

274

00:12:07,110 --> 00:12:01,269

hi my name is gabby tony how do you cook

275

00:12:11,509 --> 00:12:09,670

so we have a couple ways to do that we

276
00:12:13,990 --> 00:12:11,519
have some rehydratable foods that come

277
00:12:15,190 --> 00:12:14,000
in packages like this this is uh

278
00:12:16,389 --> 00:12:15,200
probably your favorite right it's

279
00:12:17,750 --> 00:12:16,399
broccoli

280
00:12:19,670 --> 00:12:17,760
but what we do with these these are

281
00:12:21,590 --> 00:12:19,680
rehydratable so we hook these up to a

282
00:12:23,190 --> 00:12:21,600
machine that puts water in them and you

283
00:12:24,550 --> 00:12:23,200
can put hot water in them and if you do

284
00:12:26,150 --> 00:12:24,560
that they're pretty much ready to eat in

285
00:12:27,430 --> 00:12:26,160
about five minutes

286
00:12:28,550 --> 00:12:27,440
but if you want to heat them up even

287
00:12:30,870 --> 00:12:28,560
more

288
00:12:32,710 --> 00:12:30,880

or if you want to have a pouch of foods

289

00:12:33,509 --> 00:12:32,720

a lot of our foods comes in pouches like

290

00:12:35,110 --> 00:12:33,519

this

291

00:12:37,350 --> 00:12:35,120

we have a convection oven that looks

292

00:12:38,949 --> 00:12:37,360

like a little miniature suitcase that we

293

00:12:40,550 --> 00:12:38,959

put them in and you can heat them up for

294

00:12:42,150 --> 00:12:40,560

as long as you want usually takes about

295

00:12:45,990 --> 00:12:42,160

20 to 30 minutes

296

00:12:46,000 --> 00:12:49,269

thank you

297

00:12:53,829 --> 00:12:50,949

hello my name is mary elizabeth

298

00:12:55,430 --> 00:12:53,839

kirkpatrick i have two questions for you

299

00:12:57,509 --> 00:12:55,440

do you have a closet for your clothes

300

00:13:01,750 --> 00:12:57,519

and spacesuit what happens to your dirty

301
00:13:04,790 --> 00:13:03,190
very good question these are a lot of

302
00:13:06,790 --> 00:13:04,800
logistics questions that you guys are

303
00:13:08,870 --> 00:13:06,800
asking it's very important for you know

304
00:13:10,550 --> 00:13:08,880
brushing teeth and eating and and

305
00:13:12,470 --> 00:13:10,560
clothes management because otherwise

306
00:13:15,269 --> 00:13:12,480
everything's a big mess so we have

307
00:13:17,750 --> 00:13:15,279
little bags like this right here

308
00:13:20,389 --> 00:13:17,760
that we typically keep about two weeks

309
00:13:22,069 --> 00:13:20,399
worth of clothes in maybe a little more

310
00:13:23,509 --> 00:13:22,079
so we'll put maybe two weeks of our

311
00:13:25,509 --> 00:13:23,519
clothes in here and then set it right

312
00:13:27,750 --> 00:13:25,519
next to our little bedroom

313
00:13:29,269 --> 00:13:27,760

and that way it's easily accessible to

314

00:13:31,190 --> 00:13:29,279

get our stuff that we need for a couple

315

00:13:32,949 --> 00:13:31,200

weeks and then after that's up then

316

00:13:35,269 --> 00:13:32,959

we'll kind of reload a bag like that

317

00:13:37,910 --> 00:13:35,279

from another bigger suitcase

318

00:13:39,430 --> 00:13:37,920

where we keep the rest of our stuff

319

00:13:42,230 --> 00:13:39,440

and i already forgot your second

320

00:13:47,590 --> 00:13:42,240

question i'm sorry

321

00:13:51,910 --> 00:13:50,310

oh yeah so we wear our clothes for

322

00:13:53,509 --> 00:13:51,920

really about as long as you can stand

323

00:13:55,590 --> 00:13:53,519

them and then you throw them away so we

324

00:13:58,470 --> 00:13:55,600

don't have any way to clean them up here

325

00:13:59,829 --> 00:13:58,480

um we get uh not very many clothes as

326

00:14:01,509 --> 00:13:59,839

you might think because there's just not

327

00:14:04,310 --> 00:14:01,519

a lot of room not and it's very

328

00:14:07,350 --> 00:14:04,320

expensive to fly things up here so

329

00:14:08,790 --> 00:14:07,360

we get a couple pairs of pants uh

330

00:14:10,949 --> 00:14:08,800

probably for the whole mission and then

331

00:14:12,870 --> 00:14:10,959

we get a shirt about once a week and

332

00:14:13,829 --> 00:14:12,880

then we get workout clothes once a week

333

00:14:15,910 --> 00:14:13,839

so

334

00:14:17,350 --> 00:14:15,920

we have to manage our dirty clothes but

335

00:14:24,069 --> 00:14:17,360

once they're dirty and we're done with

336

00:14:29,269 --> 00:14:26,310

hello my name is hank chopra and my

337

00:14:31,430 --> 00:14:29,279

question is how much force is exerted to

338

00:14:36,790 --> 00:14:31,440

the engines in order to control the

339

00:14:40,470 --> 00:14:38,550

well believe it or not even as massive

340

00:14:42,710 --> 00:14:40,480

as this space station is it doesn't take

341

00:14:45,110 --> 00:14:42,720

much force at all and we have little

342

00:14:47,430 --> 00:14:45,120

little engines called thrusters that we

343

00:14:48,629 --> 00:14:47,440

use to sometimes reorient the space

344

00:14:49,829 --> 00:14:48,639

station and put it in a different

345

00:14:51,350 --> 00:14:49,839

attitude

346

00:14:53,829 --> 00:14:51,360

in general it just stays in the orbit

347

00:14:55,670 --> 00:14:53,839

that we're in doesn't need any jets or

348

00:14:57,030 --> 00:14:55,680

anything firing any engines firing

349

00:14:58,389 --> 00:14:57,040

continuously

350

00:15:00,230 --> 00:14:58,399

but every now and then for different

351

00:15:01,829 --> 00:15:00,240

events we'll orient the station in a

352

00:15:03,829 --> 00:15:01,839

different direction and we'll need to

353

00:15:06,230 --> 00:15:03,839

use those thrusters in that case but

354

00:15:10,629 --> 00:15:06,240

very little force

355

00:15:14,790 --> 00:15:13,030

my name is carson dodd how do you talk

356

00:15:20,470 --> 00:15:14,800

to each other inside the space station

357

00:15:24,550 --> 00:15:22,550

so when we're inside we just kind of

358

00:15:26,470 --> 00:15:24,560

wherever each other are we just visually

359

00:15:28,790 --> 00:15:26,480

go find them and talk to them just like

360

00:15:30,230 --> 00:15:28,800

i'd be talking to you in your classroom

361

00:15:32,389 --> 00:15:30,240

when we go outside that's a bit

362

00:15:34,949 --> 00:15:32,399

different the two space walkers when you

363

00:15:36,710 --> 00:15:34,959

go outside are talking uh what's called

364

00:15:38,389 --> 00:15:36,720

on the big loop so when every time they

365

00:15:40,710 --> 00:15:38,399

talk it's going between the space

366

00:15:42,949 --> 00:15:40,720

walkers it's also coming on board the

367

00:15:45,350 --> 00:15:42,959

space station and also going to the

368

00:15:47,670 --> 00:15:45,360

mission control centers around the world

369

00:15:49,910 --> 00:15:47,680

mainly to houston which is where the

370

00:15:52,150 --> 00:15:49,920

spacewalks are being driven out of

371

00:15:53,509 --> 00:15:52,160

in the case of our spacewalk so you may

372

00:15:56,150 --> 00:15:53,519

have heard we had a spacewalk last

373

00:15:58,310 --> 00:15:56,160

friday it went very well and uh tomo

374

00:16:01,110 --> 00:15:58,320

pesque and myself are going back outside

375

00:16:02,790 --> 00:16:01,120

this friday for our second spacewalk so

376

00:16:05,749 --> 00:16:02,800

hopefully you guys can tune in and watch

377

00:16:08,870 --> 00:16:05,759

a little of it on friday

378

00:16:11,030 --> 00:16:08,880

thank you

379

00:16:12,870 --> 00:16:11,040

my name is jack schaefer how long can

380

00:16:18,870 --> 00:16:12,880

you be outside of the space station can

381

00:16:22,310 --> 00:16:20,470

well that would be nice i think we would

382

00:16:24,389 --> 00:16:22,320

go out a lot more often but no it's a

383

00:16:26,870 --> 00:16:24,399

very uh it's very dangerous out there

384

00:16:29,030 --> 00:16:26,880

and so it's very planned and calculated

385

00:16:31,030 --> 00:16:29,040

typically when we go outside

386

00:16:33,350 --> 00:16:31,040

and these days we're going out a couple

387

00:16:34,310 --> 00:16:33,360

times a year maybe would be the average

388

00:16:36,230 --> 00:16:34,320

i think

389

00:16:37,829 --> 00:16:36,240

we're just lucky enough that we're here

390

00:16:39,829 --> 00:16:37,839

during a time where we have some planned

391

00:16:42,069 --> 00:16:39,839

space walks and that's why we're going

392

00:16:43,829 --> 00:16:42,079

out and in general we go out about six

393

00:16:45,509 --> 00:16:43,839

and a half to seven hours for each

394

00:16:47,110 --> 00:16:45,519

spacewalk so it's pretty much like your

395

00:16:48,389 --> 00:16:47,120

entire school day

396

00:16:50,470 --> 00:16:48,399

if you're thinking like that but we

397

00:16:52,230 --> 00:16:50,480

don't have lunch or break or recess or

398

00:16:53,749 --> 00:16:52,240

anything like that so

399

00:16:54,790 --> 00:16:53,759

we're very exhausted when we get back

400

00:16:56,790 --> 00:16:54,800

inside

401
00:16:59,350 --> 00:16:56,800
and ready to eat for sure and we sleep

402
00:17:03,350 --> 00:16:59,360
very well that night

403
00:17:07,110 --> 00:17:05,510
hi my name is brooks bradberry and how

404
00:17:11,909 --> 00:17:07,120
do you clip your nails on the space

405
00:17:16,549 --> 00:17:14,470
all right um very carefully is probably

406
00:17:18,630 --> 00:17:16,559
the best answer but you clip them just

407
00:17:20,710 --> 00:17:18,640
like you do on earth the problem is that

408
00:17:23,029 --> 00:17:20,720
as soon as you clip it it goes flying

409
00:17:24,789 --> 00:17:23,039
off so you have to manage that

410
00:17:26,789 --> 00:17:24,799
typically with when you're doing things

411
00:17:28,870 --> 00:17:26,799
with small things like fingernails

412
00:17:30,549 --> 00:17:28,880
you'll get a piece of tape and kind of

413
00:17:32,470 --> 00:17:30,559

invert it and stick it near you so that

414

00:17:33,830 --> 00:17:32,480

you can grab little things like that and

415

00:17:35,830 --> 00:17:33,840

stick it to the tape while you're

416

00:17:37,350 --> 00:17:35,840

continuing continuing to do what you're

417

00:17:38,789 --> 00:17:37,360

doing and then when you're done of

418

00:17:40,470 --> 00:17:38,799

course you wire that up and throw it

419

00:17:44,789 --> 00:17:40,480

away

420

00:17:48,710 --> 00:17:46,630

my name is landon collish and our

421

00:17:54,789 --> 00:17:48,720

stomach aches more severe in space due

422

00:17:58,870 --> 00:17:57,029

that's a good question and nobody in my

423

00:18:02,230 --> 00:17:58,880

crew so far has had one so i can't

424

00:18:03,830 --> 00:18:02,240

truthfully answer that i don't think so

425

00:18:05,510 --> 00:18:03,840

your stomach is kind of in a different

426

00:18:07,029 --> 00:18:05,520

position obviously than it is on earth

427

00:18:09,110 --> 00:18:07,039

it's just kind of floating in the middle

428

00:18:11,430 --> 00:18:09,120

of your body it's not sitting down lower

429

00:18:13,350 --> 00:18:11,440

like when gravity's pulling on it

430

00:18:15,029 --> 00:18:13,360

but i'm not sure it would be more severe

431

00:18:18,630 --> 00:18:15,039

or not i don't think so i think it would

432

00:18:22,070 --> 00:18:18,640

feel very similar to being on earth

433

00:18:25,830 --> 00:18:24,150

hello my name is raquel watkins and i

434

00:18:31,029 --> 00:18:25,840

was just wondering what do you miss the

435

00:18:34,789 --> 00:18:32,789

well that's an easy one i miss my family

436

00:18:36,549 --> 00:18:34,799

the most for sure

437

00:18:38,630 --> 00:18:36,559

and just being there and missing some of

438

00:18:41,430 --> 00:18:38,640

my kids events and being part of the the

439

00:18:43,270 --> 00:18:41,440

live their lives so that's a big deal to

440

00:18:45,029 --> 00:18:43,280

be away for five months and you can

441

00:18:47,110 --> 00:18:45,039

imagine if your parents are gone for

442

00:18:49,590 --> 00:18:47,120

that long what they would miss so to me

443

00:18:52,950 --> 00:18:49,600

that's what i miss the most

444

00:19:01,270 --> 00:18:55,510

hi my name is finney roach what plants

445

00:19:01,280 --> 00:19:07,190

so the first part of that was cut off

446

00:19:14,950 --> 00:19:09,510

my name is finney roach what plants are

447

00:19:19,590 --> 00:19:17,590

so currently we have some plants in the

448

00:19:21,110 --> 00:19:19,600

european module being grown by the

449

00:19:22,830 --> 00:19:21,120

french astronaut and he's growing some

450

00:19:25,990 --> 00:19:22,840

mustard right now some

451
00:19:28,150 --> 00:19:26,000
lentils and it's all actually students

452
00:19:29,750 --> 00:19:28,160
that sent those up for him some european

453
00:19:31,590 --> 00:19:29,760
students so he's doing that project for

454
00:19:33,669 --> 00:19:31,600
them and like i mentioned earlier i grew

455
00:19:34,950 --> 00:19:33,679
some lettuce over the first few months

456
00:19:37,990 --> 00:19:34,960
of my mission

457
00:19:40,950 --> 00:19:38,000
and that's all we have going right now

458
00:19:43,270 --> 00:19:40,960
thank you real quick

459
00:19:44,870 --> 00:19:43,280
shane we're out of time we are so

460
00:19:46,310 --> 00:19:44,880
grateful to you and proud of you my

461
00:19:48,310 --> 00:19:46,320
friend thank you for giving our

462
00:19:52,710 --> 00:19:48,320
community this time good luck and

463
00:19:58,950 --> 00:19:54,150

thank you great to see you love it

464

00:20:04,420 --> 00:20:01,510

station this is houston acr that

465

00:20:07,909 --> 00:20:04,430

concludes the event

466

00:20:11,190 --> 00:20:09,510

thank you to all participants and guests

467

00:20:12,549 --> 00:20:11,200

from the levitt school station please