



1  
00:00:05,590 --> 00:00:02,149  
station this is houston are you ready

2  
00:00:05,600 --> 00:00:09,350  
we are ready for the event

3  
00:00:13,190 --> 00:00:11,190  
national public radio this is mission

4  
00:00:14,789 --> 00:00:13,200  
control houston please call station for

5  
00:00:16,950 --> 00:00:14,799  
voice check

6  
00:00:20,870 --> 00:00:16,960  
station this is national public radio

7  
00:00:20,880 --> 00:00:25,269  
we hear you loud and clear

8  
00:00:25,279 --> 00:00:30,630  
all right good morning

9  
00:00:33,750 --> 00:00:31,750  
good morning we're looking forward to

10  
00:00:35,670 --> 00:00:33,760  
talking to you today

11  
00:00:39,990 --> 00:00:35,680  
hey what what time is it right now where

12  
00:00:44,470 --> 00:00:41,670  
you know we work off of uh greenwich

13  
00:00:46,790 --> 00:00:44,480

mean time so it's about 12 10

14

00:00:48,790 --> 00:00:46,800

so it's about lunch time for us

15

00:00:51,670 --> 00:00:48,800

okay

16

00:00:54,630 --> 00:00:51,680

you know i've seen a lot of uh images

17

00:00:57,029 --> 00:00:54,640

and video of what it's like up there

18

00:01:02,790 --> 00:00:57,039

one thing i've always wondered what does

19

00:01:06,950 --> 00:01:04,390

you know we have this ongoing discussion

20

00:01:09,109 --> 00:01:06,960

about how do you capture a smell in

21

00:01:11,030 --> 00:01:09,119

words and so it's really difficult to

22

00:01:13,030 --> 00:01:11,040

say you know

23

00:01:15,350 --> 00:01:13,040

yesterday tim peake was talking about

24

00:01:16,950 --> 00:01:15,360

how it smells sort of clinical

25

00:01:18,550 --> 00:01:16,960

it's really hard to describe but you

26

00:01:20,070 --> 00:01:18,560

know in general the air is very well

27

00:01:23,270 --> 00:01:20,080

processed and so once you've been here

28

00:01:25,030 --> 00:01:23,280

for a while you don't smell anything

29

00:01:26,870 --> 00:01:25,040

to speak of you know jeff just came the

30

00:01:28,469 --> 00:01:26,880

other day and he said he had this uh

31

00:01:30,149 --> 00:01:28,479

distinct memory of having been here

32

00:01:33,670 --> 00:01:30,159

before because of the smell of space

33

00:01:43,429 --> 00:01:35,590

uh when was the last time one of you

34

00:01:47,350 --> 00:01:45,350

you know i think i've sneezed you know a

35

00:01:48,870 --> 00:01:47,360

couple days ago how about you tim

36

00:01:50,710 --> 00:01:48,880

recently

37

00:01:52,230 --> 00:01:50,720

yeah you know up here one of the things

38

00:01:54,469 --> 00:01:52,240

that can happen is you do actually get a

39

00:01:55,990 --> 00:01:54,479

bit uh congested because maybe it's

40

00:01:58,149 --> 00:01:56,000

because of the in increased

41

00:02:00,310 --> 00:01:58,159

inter-cranial pressure in the head and

42

00:02:02,069 --> 00:02:00,320

also dust floats in the atmosphere

43

00:02:03,350 --> 00:02:02,079

unlike on earth where all the dust gets

44

00:02:05,590 --> 00:02:03,360

sucked down to the floor because of

45

00:02:07,990 --> 00:02:05,600

gravity so we do sneeze on board the

46

00:02:10,070 --> 00:02:08,000

station occasionally

47

00:02:12,710 --> 00:02:10,080

when you sneeze does that sneeze just

48

00:02:20,150 --> 00:02:12,720

blast uh into the atmosphere of the

49

00:02:22,949 --> 00:02:21,430

you know that goes back to the point

50

00:02:25,030 --> 00:02:22,959

that tim made about us having a very

51  
00:02:26,949 --> 00:02:25,040  
good air system air circulation system

52  
00:02:29,430 --> 00:02:26,959  
here so uh the air flow goes in a very

53  
00:02:31,110 --> 00:02:29,440  
definite direction with uh uh our

54  
00:02:33,990 --> 00:02:31,120  
extractor fans and that cleans up the

55  
00:02:36,470 --> 00:02:34,000  
atmosphere for us

56  
00:02:39,030 --> 00:02:36,480  
i'm curious are you um

57  
00:02:41,509 --> 00:02:39,040  
up there are you able to pick out the

58  
00:02:42,790 --> 00:02:41,519  
constellations that we can see on earth

59  
00:02:44,869 --> 00:02:42,800  
like uh

60  
00:02:47,350 --> 00:02:44,879  
could could you say find the big dipper

61  
00:02:50,470 --> 00:02:47,360  
or are there just too many stars to see

62  
00:02:54,869 --> 00:02:52,229  
oh no you can find the constellations

63  
00:02:56,390 --> 00:02:54,879

because what we know of as the common

64

00:02:57,990 --> 00:02:56,400

constellations

65

00:02:59,270 --> 00:02:58,000

are much brighter than the other stars

66

00:03:01,910 --> 00:02:59,280

and the same thing is up here even

67

00:03:04,390 --> 00:03:01,920

though we uh

68

00:03:07,110 --> 00:03:04,400

can see many many more stars the bright

69

00:03:09,270 --> 00:03:07,120

ones still stand out against the star

70

00:03:11,270 --> 00:03:09,280

field background it's interesting most

71

00:03:12,390 --> 00:03:11,280

of our windows point to the earth so we

72

00:03:13,430 --> 00:03:12,400

have very

73

00:03:15,270 --> 00:03:13,440

few

74

00:03:16,790 --> 00:03:15,280

windows that give us access to the star

75

00:03:18,470 --> 00:03:16,800

field but the cupola is one of those

76  
00:03:20,630 --> 00:03:18,480  
places where you can see the star field

77  
00:03:22,550 --> 00:03:20,640  
about 20 degrees or so

78  
00:03:24,070 --> 00:03:22,560  
above the horizon if you turn all the

79  
00:03:25,509 --> 00:03:24,080  
lights off

80  
00:03:27,589 --> 00:03:25,519  
and you're on the night side of the

81  
00:03:31,430 --> 00:03:27,599  
earth then you see this spectacular

82  
00:03:36,070 --> 00:03:33,270  
so you guys are in space you're in the

83  
00:03:37,750 --> 00:03:36,080  
space station it's super cool for us to

84  
00:03:39,509 --> 00:03:37,760  
kind of contemplate that

85  
00:03:42,630 --> 00:03:39,519  
but ultimately you're also your

86  
00:03:44,869 --> 00:03:42,640  
roommates you have to share space

87  
00:03:49,110 --> 00:03:44,879  
do you guys have to fight over the music

88  
00:03:53,350 --> 00:03:51,509

you know we all get along famously well

89

00:03:54,949 --> 00:03:53,360

and so we don't fight over the music you

90

00:03:56,869 --> 00:03:54,959

know we usually come to

91

00:03:59,110 --> 00:03:56,879

some sort of agreement on on all the

92

00:04:01,190 --> 00:03:59,120

things you have to share and uh you know

93

00:04:02,949 --> 00:04:01,200

unlike being college roommates crammed

94

00:04:05,190 --> 00:04:02,959

into a small apartment we've got like

95

00:04:09,190 --> 00:04:05,200

this big house to live in so it's pretty

96

00:04:16,390 --> 00:04:11,110

i wonder

97

00:04:19,030 --> 00:04:16,400

you have uh traditions or rituals that

98

00:04:21,110 --> 00:04:19,040

um you go through to try and stay

99

00:04:26,150 --> 00:04:21,120

connected with your friends and family

100

00:04:28,629 --> 00:04:27,670

yeah we're very fortunate here on the

101  
00:04:30,150 --> 00:04:28,639  
space station we have great

102  
00:04:32,870 --> 00:04:30,160  
communications with friends and family

103  
00:04:34,790 --> 00:04:32,880  
we uh have some phone lines that so

104  
00:04:36,390 --> 00:04:34,800  
whenever we have satellite coverage we

105  
00:04:37,909 --> 00:04:36,400  
can actually call our friends and family

106  
00:04:39,430 --> 00:04:37,919  
and speak to them from the space station

107  
00:04:41,590 --> 00:04:39,440  
and once a week we get a video

108  
00:04:43,270 --> 00:04:41,600  
conference as well with our families

109  
00:04:45,110 --> 00:04:43,280  
which is great you know that's a really

110  
00:04:46,629 --> 00:04:45,120  
nice facility to have and it helps keep

111  
00:04:48,550 --> 00:04:46,639  
us in touch with those back down on

112  
00:04:50,790 --> 00:04:48,560  
planet earth

113  
00:04:52,950 --> 00:04:50,800

as technology has improved though and

114

00:04:54,390 --> 00:04:52,960

communication has become easier

115

00:04:59,830 --> 00:04:54,400

do you ever wish that it was more

116

00:05:03,909 --> 00:05:01,430

yeah it's a great question you know a

117

00:05:05,830 --> 00:05:03,919

little peace and quiet huh you know i

118

00:05:07,990 --> 00:05:05,840

think it's actually a great balance and

119

00:05:10,310 --> 00:05:08,000

you know as technology improves we

120

00:05:12,390 --> 00:05:10,320

improve how we use it as well so i think

121

00:05:14,310 --> 00:05:12,400

you know we strike a balance and

122

00:05:15,830 --> 00:05:14,320

you know we have a variety of ways to

123

00:05:17,830 --> 00:05:15,840

communicate both with friends and family

124

00:05:21,990 --> 00:05:17,840

and also with the ground and i think it

125

00:05:25,749 --> 00:05:24,550

when when you dream about work

126

00:05:34,070 --> 00:05:25,759

up there

127

00:05:37,350 --> 00:05:35,270

so we've had a little sidebar

128

00:05:39,749 --> 00:05:37,360

conversation here jeff and tim say they

129

00:05:41,909 --> 00:05:39,759

really don't dream much you know and uh

130

00:05:44,150 --> 00:05:41,919

i think you know the dreams here i think

131

00:05:46,870 --> 00:05:44,160

you know when you sleep at night it's a

132

00:05:48,870 --> 00:05:46,880

similar pattern to to being on earth you

133

00:05:50,550 --> 00:05:48,880

know there is sort of a transition for a

134

00:05:53,189 --> 00:05:50,560

lot of folks where their dreams

135

00:05:55,670 --> 00:05:53,199

transition from earthbound to floating i

136

00:05:57,909 --> 00:05:55,680

think since we've been here for uh 100

137

00:06:00,390 --> 00:05:57,919

days as of today you know some of my

138

00:06:02,790 --> 00:06:00,400

dreams i'm floating some i'm back on

139

00:06:04,390 --> 00:06:02,800

earth and remembering childhood memories

140

00:06:06,950 --> 00:06:04,400

and things like that so it's like it's

141

00:06:09,350 --> 00:06:06,960

like being on earth only this added

142

00:06:11,590 --> 00:06:09,360

flavor of having some dreams in zero

143

00:06:13,110 --> 00:06:11,600

gravity

144

00:06:15,189 --> 00:06:13,120

have you guys ever been walking around

145

00:06:16,230 --> 00:06:15,199

or i guess floating around in the space

146

00:06:17,909 --> 00:06:16,240

station

147

00:06:19,590 --> 00:06:17,919

and found something that shouldn't be

148

00:06:21,830 --> 00:06:19,600

there like you know when you're at home

149

00:06:23,749 --> 00:06:21,840

you might see a spider in the corner or

150

00:06:28,710 --> 00:06:23,759

something like that does that ever

151  
00:06:31,909 --> 00:06:30,629  
yes it does happen quite a bit because

152  
00:06:33,189 --> 00:06:31,919  
obviously you know things do float

153  
00:06:34,790 --> 00:06:33,199  
around up here we try and keep

154  
00:06:36,469 --> 00:06:34,800  
everything tidy and ship shape and

155  
00:06:39,270 --> 00:06:36,479  
velcro down but for example the other

156  
00:06:41,110 --> 00:06:39,280  
day i was doing a recorded video message

157  
00:06:42,710 --> 00:06:41,120  
and uh it was about three minutes long i

158  
00:06:44,710 --> 00:06:42,720  
was almost at the end everything was

159  
00:06:46,230 --> 00:06:44,720  
going well and a battery just floated

160  
00:06:49,189 --> 00:06:46,240  
right right in front of me past the

161  
00:06:51,270 --> 00:06:49,199  
camera uh so that that kind of stuff can

162  
00:06:53,189 --> 00:06:51,280  
happen occasionally uh but we try and

163  
00:06:54,469 --> 00:06:53,199

keep everything uh tidy down the other

164

00:06:56,469 --> 00:06:54,479

thing that's interesting i noticed as

165

00:06:58,870 --> 00:06:56,479

well the other day was uh something out

166

00:07:00,309 --> 00:06:58,880

the corner of my eye moving and my first

167

00:07:02,629 --> 00:07:00,319

thought was it will be a flyer or

168

00:07:04,629 --> 00:07:02,639

mosquito or a bug but of course you know

169

00:07:06,309 --> 00:07:04,639

there are no insects up here and it does

170

00:07:10,390 --> 00:07:06,319

take a while before you get used to that

171

00:07:15,189 --> 00:07:12,710

i i was looking at all these old photos

172

00:07:18,150 --> 00:07:15,199

that nasa had released of the apollo

173

00:07:19,510 --> 00:07:18,160

missions and uh

174

00:07:21,670 --> 00:07:19,520

everyone

175

00:07:22,870 --> 00:07:21,680

up there looked so it looked so normal

176

00:07:24,469 --> 00:07:22,880

it looked like they were just living

177

00:07:25,589 --> 00:07:24,479

their lives they just happened to be in

178

00:07:27,110 --> 00:07:25,599

space

179

00:07:28,790 --> 00:07:27,120

i wonder if you have moments where

180

00:07:30,790 --> 00:07:28,800

you're just doing the day-to-day things

181

00:07:31,830 --> 00:07:30,800

you do shaving eating

182

00:07:37,430 --> 00:07:31,840

and it

183

00:07:41,990 --> 00:07:39,510

you know it's a very surreal environment

184

00:07:43,830 --> 00:07:42,000

in which to live because

185

00:07:46,230 --> 00:07:43,840

part of it is just like every day you

186

00:07:48,150 --> 00:07:46,240

have to you know get up in the morning

187

00:07:49,990 --> 00:07:48,160

and and get ready get cleaned up have

188

00:07:52,150 --> 00:07:50,000

breakfast uh but then every once in a

189

00:07:54,950 --> 00:07:52,160

while you realize that hey you know it's

190

00:07:57,029 --> 00:07:54,960

completely different in some respects um

191

00:07:58,390 --> 00:07:57,039

so i think you know part of the fact

192

00:08:00,550 --> 00:07:58,400

that it's uh

193

00:08:03,189 --> 00:08:00,560

it's so strange here is that it feels so

194

00:08:07,350 --> 00:08:03,199

normal just to to live and and adapt to

195

00:08:11,029 --> 00:08:09,110

when you're talking to

196

00:08:13,189 --> 00:08:11,039

older astronauts or astronauts that have

197

00:08:14,390 --> 00:08:13,199

you know been doing this or

198

00:08:15,909 --> 00:08:14,400

astronauts that were doing this you know

199

00:08:18,070 --> 00:08:15,919

long time ago

200

00:08:19,189 --> 00:08:18,080

did they ever you know talk about how

201

00:08:22,469 --> 00:08:19,199

how

202

00:08:27,029 --> 00:08:22,479

harder back then and do they ever give

203

00:08:30,550 --> 00:08:28,790

no actually it's just the opposite that

204

00:08:32,709 --> 00:08:30,560

when we have conversations when i have

205

00:08:34,469 --> 00:08:32,719

conversations anyway uh speaking

206

00:08:36,790 --> 00:08:34,479

personally with some of the older folks

207

00:08:38,310 --> 00:08:36,800

they they greatly respect what we're

208

00:08:41,670 --> 00:08:38,320

doing now

209

00:08:43,909 --> 00:08:41,680

uh i mean just a uh long duration the

210

00:08:46,310 --> 00:08:43,919

continuous presence in space the you

211

00:08:48,550 --> 00:08:46,320

know over 15 years now going on fifteen

212

00:08:50,550 --> 00:08:48,560

and a half years of continuous presence

213

00:08:53,829 --> 00:08:50,560

and everybody staying up here anywhere

214

00:08:56,870 --> 00:08:53,839

from um a a few months or a couple

215

00:08:59,110 --> 00:08:56,880

months to up to a year now uh they have

216

00:09:01,829 --> 00:08:59,120

the utmost respect for uh for what we're

217

00:09:04,230 --> 00:09:01,839

doing and and we in the feeling is

218

00:09:07,030 --> 00:09:04,240

mutual we have a great camaraderie among

219

00:09:09,350 --> 00:09:07,040

the uh the astronaut core current and uh

220

00:09:11,670 --> 00:09:09,360

former

221

00:09:14,470 --> 00:09:11,680

i'm curious when you're back on earth

222

00:09:15,829 --> 00:09:14,480

and you're at a party and talking to

223

00:09:17,509 --> 00:09:15,839

people and people are talking about

224

00:09:19,750 --> 00:09:17,519

their jobs

225

00:09:21,829 --> 00:09:19,760

if if you have to hold back because i

226

00:09:23,670 --> 00:09:21,839

feel like once you say oh i'm i'm an

227

00:09:25,509 --> 00:09:23,680

astronaut

228

00:09:27,590 --> 00:09:25,519

the conversation is destroyed you you

229

00:09:29,829 --> 00:09:27,600

are the coolest person in the room and

230

00:09:34,230 --> 00:09:29,839

no one can really follow up you have to

231

00:09:37,350 --> 00:09:35,670

you know it's a great observation

232

00:09:39,269 --> 00:09:37,360

because uh i mean

233

00:09:41,190 --> 00:09:39,279

i think we all consider this to be about

234

00:09:43,269 --> 00:09:41,200

the coolest job in the world and uh

235

00:09:45,910 --> 00:09:43,279

sometimes when you know you are at that

236

00:09:48,470 --> 00:09:45,920

cocktail party and uh and that comes out

237

00:09:50,230 --> 00:09:48,480

that you know this is our job then it

238

00:09:52,389 --> 00:09:50,240

does really sort of change the topic

239

00:09:54,870 --> 00:09:52,399

completely so um you know this is

240

00:09:55,990 --> 00:09:54,880

something to to work through if you uh

241

00:09:57,509 --> 00:09:56,000

really want to be the center of

242

00:09:59,430 --> 00:09:57,519

attention at a party all you got to do

243

00:10:01,269 --> 00:09:59,440

is say what your job is and it sort of

244

00:10:03,430 --> 00:10:01,279

steers the conversation but

245

00:10:06,389 --> 00:10:03,440

i think most of us just prefer to try to

246

00:10:08,310 --> 00:10:06,399

blend in and be part of the group

247

00:10:10,630 --> 00:10:08,320

would you ever go out in public wearing

248

00:10:15,990 --> 00:10:10,640

a spacesuit just so you wouldn't have to

249

00:10:19,030 --> 00:10:17,269

you know that would definitely not might

250

00:10:20,790 --> 00:10:19,040

be my preference i

251  
00:10:22,230 --> 00:10:20,800  
but uh you know we have a lot of events

252  
00:10:24,230 --> 00:10:22,240  
where we go out in our blue suits we

253  
00:10:27,750 --> 00:10:24,240  
know exactly what it's like to uh to go

254  
00:10:29,430 --> 00:10:27,760  
around and and to put that on display

255  
00:10:33,430 --> 00:10:29,440  
well thank you all so much and and

256  
00:10:36,550 --> 00:10:35,829  
thank you so much enjoy the conversation

257  
00:10:38,310 --> 00:10:36,560  
and

258  
00:10:51,269 --> 00:10:38,320  
you all have a great day

259  
00:10:55,269 --> 00:10:53,509  
station this is houston acr that

260  
00:10:57,509 --> 00:10:55,279  
concludes the national public radio

261  
00:11:02,389 --> 00:10:57,519  
portion of the event please stand by for

262  
00:11:02,399 --> 00:11:09,350  
station this is wired how do you hear me

263  
00:11:09,360 --> 00:11:17,350

we hear you loud and clear

264

00:11:20,389 --> 00:11:18,870

hi there

265

00:11:22,870 --> 00:11:20,399

um

266

00:11:23,910 --> 00:11:22,880

so these questions that i'm going to ask

267

00:11:25,910 --> 00:11:23,920

are

268

00:11:29,190 --> 00:11:25,920

these came from google searches these

269

00:11:31,190 --> 00:11:29,200

are sort of the most searched questions

270

00:11:34,150 --> 00:11:31,200

on google so this is what the people

271

00:11:41,670 --> 00:11:36,150

and if you could just first introduce

272

00:11:47,670 --> 00:11:44,230

sure um i'm tim copra commander of

273

00:11:49,990 --> 00:11:47,680

expedition 47 we have tim peake he's an

274

00:11:52,389 --> 00:11:50,000

astronaut with european space agency and

275

00:11:54,870 --> 00:11:52,399

a british astronaut and jeff williams is

276

00:11:58,150 --> 00:11:54,880

a fellow nasa astronaut and just arrived

277

00:12:00,790 --> 00:11:58,160

here just a few days ago and we're back

278

00:12:02,389 --> 00:12:00,800

up to a crew of of six we have three of

279

00:12:04,550 --> 00:12:02,399

our cosmonaut

280

00:12:07,110 --> 00:12:04,560

colleagues at the other end of station

281

00:12:11,190 --> 00:12:09,110

thank you

282

00:12:12,470 --> 00:12:11,200

and if you don't mind repeating uh the

283

00:12:14,949 --> 00:12:12,480

questions they're they're short

284

00:12:16,230 --> 00:12:14,959

questions um just before you answer that

285

00:12:19,350 --> 00:12:16,240

would be awesome

286

00:12:21,030 --> 00:12:19,360

um so the first question from google

287

00:12:21,750 --> 00:12:21,040

autocomplete

288

00:12:37,430 --> 00:12:21,760

is

289

00:12:40,230 --> 00:12:37,440

means

290

00:12:42,150 --> 00:12:40,240

the real question is can we whistle in a

291

00:12:43,829 --> 00:12:42,160

spacesuit

292

00:12:45,590 --> 00:12:43,839

and it can be very difficult actually

293

00:12:46,949 --> 00:12:45,600

when you're outside doing a spacewalk

294

00:12:48,629 --> 00:12:46,959

and it would be the same on the moon

295

00:12:51,269 --> 00:12:48,639

because in that in that case you're

296

00:12:53,030 --> 00:12:51,279

breathing 100 oxygen which means you're

297

00:12:55,430 --> 00:12:53,040

at a much lower atmosphere because you

298

00:12:56,710 --> 00:12:55,440

don't need to be at a higher pressure so

299

00:12:58,470 --> 00:12:56,720

when you're at a

300

00:13:00,550 --> 00:12:58,480

i'm sorry a lower pressure so when

301

00:13:02,230 --> 00:13:00,560

you're at a lower pressure

302

00:13:03,829 --> 00:13:02,240

whistling becomes a little bit more

303

00:13:05,990 --> 00:13:03,839

challenging we certainly can whistle

304

00:13:07,430 --> 00:13:06,000

here inside the space station because

305

00:13:09,350 --> 00:13:07,440

we're at

306

00:13:11,590 --> 00:13:09,360

at the sea level

307

00:13:23,990 --> 00:13:11,600

atmospheric pressure

308

00:13:31,030 --> 00:13:25,269

thank you

309

00:13:35,670 --> 00:13:33,509

so can astronauts wear glasses of course

310

00:13:37,269 --> 00:13:35,680

they can wear glasses you know jeff has

311

00:13:38,870 --> 00:13:37,279

his glasses on right now i'm wearing

312

00:13:41,350 --> 00:13:38,880

contact lenses

313

00:13:43,990 --> 00:13:41,360

young tim peek doesn't need glasses but

314

00:13:51,430 --> 00:13:44,000

we surely can wear them

315

00:13:54,949 --> 00:13:53,509

well astronauts can drink alcohol when

316

00:13:56,150 --> 00:13:54,959

we're training on the ground or planet

317

00:13:57,750 --> 00:13:56,160

earth but

318

00:14:00,389 --> 00:13:57,760

alcohol is not permitted on board the

319

00:14:06,629 --> 00:14:00,399

space station

320

00:14:11,350 --> 00:14:08,790

you know can astronauts cry in space of

321

00:14:14,230 --> 00:14:11,360

course astronauts can cry in space uh

322

00:14:16,150 --> 00:14:14,240

you know the water in space is different

323

00:14:17,670 --> 00:14:16,160

because it sticks to your skin it's

324

00:14:20,790 --> 00:14:17,680

almost like

325

00:14:22,949 --> 00:14:20,800

like this gluey substance that just has

326

00:14:24,949 --> 00:14:22,959

this ability to stick to your skin so if

327

00:14:26,550 --> 00:14:24,959

you were to have a really big cry then

328

00:14:30,150 --> 00:14:26,560

your eyes would just swell up with water

329

00:14:37,750 --> 00:14:30,160

instead of dropping off

330

00:14:41,990 --> 00:14:40,069

can astronauts have piercings

331

00:14:44,069 --> 00:14:42,000

i'm pretty sure there have been some of

332

00:14:45,750 --> 00:14:44,079

the female astronauts that have been up

333

00:14:47,990 --> 00:14:45,760

here the ladies that have had pierced

334

00:14:50,230 --> 00:14:48,000

ears and that kind of thing

335

00:14:51,350 --> 00:14:50,240

other than that i don't i'm not aware of

336

00:14:54,550 --> 00:14:51,360

any

337

00:14:56,790 --> 00:14:54,560

restrictions so

338

00:14:58,710 --> 00:14:56,800

but i would suggest if somebody gets a

339

00:15:02,310 --> 00:14:58,720

piercing they do it on the ground not

340

00:15:10,949 --> 00:15:03,269

okay

341

00:15:14,470 --> 00:15:12,389

you know thank you for asking us to

342

00:15:16,870 --> 00:15:14,480

repeat these questions do astronauts

343

00:15:19,110 --> 00:15:16,880

drink their own pee well

344

00:15:21,750 --> 00:15:19,120

um in a sense yes

345

00:15:24,470 --> 00:15:21,760

we have a uh the ability to process

346

00:15:27,590 --> 00:15:24,480

water here and which is an amazing thing

347

00:15:30,230 --> 00:15:27,600

right we take the the condensate that

348

00:15:32,150 --> 00:15:30,240

the system collects up the urine and all

349

00:15:34,389 --> 00:15:32,160

that gets processed and then put out of

350

00:15:36,949 --> 00:15:34,399

a portable water dispenser which is

351  
00:15:42,550 --> 00:15:36,959  
right over our head so every day that's

352  
00:15:42,560 --> 00:15:52,790  
um do astronauts keep their suits

353  
00:15:57,590 --> 00:15:54,949  
can astronauts keep their suits their

354  
00:15:59,670 --> 00:15:57,600  
spacesuits um unfortunately not no our

355  
00:16:02,310 --> 00:15:59,680  
spacesuits are quite valuable pieces of

356  
00:16:04,310 --> 00:16:02,320  
equipment um we have two spacesuits one

357  
00:16:06,790 --> 00:16:04,320  
which is like a soft spacesuit we wear

358  
00:16:09,269 --> 00:16:06,800  
inside the sawyer spacecraft for launch

359  
00:16:11,749 --> 00:16:09,279  
and for re-entry and one spacesuit that

360  
00:16:13,829 --> 00:16:11,759  
we wear outside the space station if we

361  
00:16:15,350 --> 00:16:13,839  
get the opportunity to do a space walk

362  
00:16:18,389 --> 00:16:15,360  
but no unfortunately not they're not

363  
00:16:26,389 --> 00:16:18,399

personal items of equipment

364

00:16:32,069 --> 00:16:29,670

do astronauts need passports actually

365

00:16:34,550 --> 00:16:32,079

when we come home we do need passports

366

00:16:36,949 --> 00:16:34,560

because we land in kazakhstan and we

367

00:16:38,470 --> 00:16:36,959

have to go through customs and so our

368

00:16:40,389 --> 00:16:38,480

ground team makes sure that we have our

369

00:16:43,749 --> 00:16:40,399

passport so that we can actually leave

370

00:16:45,829 --> 00:16:43,759

kazakhstan and go back to america when

371

00:16:55,030 --> 00:16:45,839

we're done

372

00:17:00,150 --> 00:16:57,910

we do have a variety of drinks on board

373

00:17:01,269 --> 00:17:00,160

the question was do astronauts drink

374

00:17:03,509 --> 00:17:01,279

tang

375

00:17:06,470 --> 00:17:03,519

and of course that comes from

376

00:17:08,549 --> 00:17:06,480

a lot of tv shows historically anyway i

377

00:17:10,230 --> 00:17:08,559

don't think we have tang specifically on

378

00:17:12,069 --> 00:17:10,240

board but we do have lots of fruit

379

00:17:16,069 --> 00:17:12,079

juices

380

00:17:18,870 --> 00:17:16,079

and fruit beverages and coffees and teas

381

00:17:19,990 --> 00:17:18,880

and and water and even now

382

00:17:22,949 --> 00:17:20,000

milk

383

00:17:27,189 --> 00:17:22,959

everything you have to add water and mix

384

00:17:30,549 --> 00:17:27,199

it up either hot or cold water and then

385

00:17:38,390 --> 00:17:32,470

the astronauts vote

386

00:17:42,950 --> 00:17:41,110

do astronauts vote in space yes we can

387

00:17:44,950 --> 00:17:42,960

vote in space in fact

388

00:17:46,789 --> 00:17:44,960

nasa has been very good about setting up

389

00:17:52,150 --> 00:17:46,799

a process so that that we can

390

00:18:05,350 --> 00:18:00,150

do astronauts wear diapers

391

00:18:08,310 --> 00:18:05,360

answer to that question um when we

392

00:18:10,549 --> 00:18:08,320

launch in the sawyers we have at least a

393

00:18:12,310 --> 00:18:10,559

couple of hours before launch sitting in

394

00:18:15,190 --> 00:18:12,320

that spacecraft and then we have to go

395

00:18:17,190 --> 00:18:15,200

through a six-hour rendezvous and then

396

00:18:19,430 --> 00:18:17,200

we have to spend a couple of hours um

397

00:18:20,710 --> 00:18:19,440

from docking until actually uh getting

398

00:18:22,710 --> 00:18:20,720

on board the space station so we wear

399

00:18:24,789 --> 00:18:22,720

diapers flat we also wear diapers when

400

00:18:27,350 --> 00:18:24,799

we go outside the space station do a

401  
00:18:29,750 --> 00:18:27,360  
space walk we could spend anything from

402  
00:18:32,230 --> 00:18:29,760  
eight to eight to ten hours inside that

403  
00:18:34,070 --> 00:18:32,240  
spacesuit sometimes longer so

404  
00:18:35,510 --> 00:18:34,080  
we're behoven to take precautions and

405  
00:18:37,270 --> 00:18:35,520  
wear diapers just in case you need to

406  
00:18:45,510 --> 00:18:37,280  
use it

407  
00:18:50,549 --> 00:18:48,230  
can humans colonize mars

408  
00:18:52,390 --> 00:18:50,559  
i think of course we can colonize mars

409  
00:18:54,150 --> 00:18:52,400  
it's a it's both

410  
00:18:56,390 --> 00:18:54,160  
a technical and a political question

411  
00:18:58,630 --> 00:18:56,400  
because it would take a tremendous

412  
00:19:00,150 --> 00:18:58,640  
amount of resources and

413  
00:19:01,909 --> 00:19:00,160

that has to have the political will and

414

00:19:03,110 --> 00:19:01,919

the funding to do that and then

415

00:19:05,909 --> 00:19:03,120

obviously we need to develop the

416

00:19:08,150 --> 00:19:05,919

technology both to get there quickly

417

00:19:09,350 --> 00:19:08,160

land on the planet and then be able to

418

00:19:10,870 --> 00:19:09,360

live there but

419

00:19:13,909 --> 00:19:10,880

i'm certain that someday we'll be able

420

00:19:16,150 --> 00:19:13,919

to see that hopefully in our lifetime

421

00:19:18,549 --> 00:19:16,160

okay thank you guys so much this was

422

00:19:20,070 --> 00:19:18,559

awesome that was what the the crowd out

423

00:19:21,909 --> 00:19:20,080

there would like to know

424

00:19:24,310 --> 00:19:21,919

one last question is just i have two

425

00:19:26,070 --> 00:19:24,320

little boys um who are four and six

426

00:19:27,990 --> 00:19:26,080

years old and they would love to be

427

00:19:32,789 --> 00:19:28,000

astronauts do you have any last words of

428

00:19:36,950 --> 00:19:34,950

you know every young person who has the

429

00:19:39,750 --> 00:19:36,960

aspiration to be an astronaut

430

00:19:42,390 --> 00:19:39,760

should study hard in math and science

431

00:19:44,070 --> 00:19:42,400

follow their passion educationally and

432

00:19:45,830 --> 00:19:44,080

be able to get along well with people

433

00:19:48,070 --> 00:19:45,840

and if you can do those things you'll be

434

00:19:50,870 --> 00:19:48,080

so competitive to become an astronaut

435

00:19:56,150 --> 00:19:50,880

you'll be able to reach your goal

436

00:19:56,160 --> 00:19:59,669

thank you have a great day