1
00:00:08,870 --> 00:00:03,990
station this is houston are you ready

2
00:00:14,310 --> 00:00:12,070
we are ready for the event

3
00:00:18,150 --> 00:00:14,320
troy school district this is houston

4
00:00:22,950 --> 00:00:20,630
station this is dr barbara fowler with

5
00:00:27,349 --> 00:00:22,960
detroit school district how do you hear

6
00:00:45,590 --> 00:00:29,189
we have you loud and clear welcome

7
00:00:51,430 --> 00:00:49,590
on behalf of the entire troy community

8
00:00:53,110 --> 00:00:51,440
i would like to welcome you and thank

9
00:00:55,110 --> 00:00:53,120
you for this great honor

10
00:01:02,630 --> 00:00:55,120
you have some students here with us that

11
00:01:07,670 --> 00:01:04,710
my name is allison and this question is

12
00:01:09,910 --> 00:01:07,680
for commander williams

13
00:01:15,990 --> 00:01:09,920

what time zone do you use and when is

14
00:01:19,429 --> 00:01:17,830
that's a great question time's difficult

15
00:01:21,830 --> 00:01:19,439
to manage up here because we don't have

16
00:01:24,550 --> 00:01:21,840
the normal day night cycle that we have

17
00:01:27,350 --> 00:01:24,560
on earth we usually work on greenwich

18
00:01:29,670 --> 00:01:27,360
mean time or the time in england

19
00:01:31,510 --> 00:01:29,680
and we get up at six o'clock in the

20
00:01:34,310 --> 00:01:31,520
morning typically and go to bed about

21
00:01:36,870 --> 00:01:34,320
ten at night that's about six hours

22
00:01:39,109 --> 00:01:36,880
earlier than your time but we also shift

23
00:01:41,910 --> 00:01:39,119
to different time zones for different

24
00:01:43,910 --> 00:01:41,920
events like spacewalks or an arriving

25
00:01:45,910 --> 00:01:43,920
vehicle for example this friday we have

26
00:01:48,789 --> 00:01:45,920
a progress a russian progress supply

27
00:01:51,190 --> 00:01:48,799
ship coming and we're going to shift and

28
00:01:53,270 --> 00:01:51,200
go to bed about six hours early get up

29
00:01:54,870 --> 00:01:53,280
about six hours early for that and then

30
00:01:57,270 --> 00:01:54,880
we're also going to shift a little bit

31
00:01:58,709 --> 00:01:57,280
more to the left earlier

32
00:02:04,950 --> 00:01:58,719
for a shuttle

33
00:02:10,869 --> 00:02:07,270
my name is hayden and this question is

34
00:02:12,550 --> 00:02:10,879
for for flight engineer creamer

35
00:02:19,110 --> 00:02:12,560
how do you keep your muscles in shape in

36
00:02:22,710 --> 00:02:20,470
hayden that's an

37
00:02:24,550 --> 00:02:22,720
awfully important question because we

38
00:02:25,589 --> 00:02:24,560

want to stay healthy and when we land we

39
00:02:26,790 --> 00:02:25,599
want to be strong enough to get out of

40
00:02:28,470 --> 00:02:26,800
the vehicle and if we have any

41
00:02:31,110 --> 00:02:28,480
emergencies we want to be able to to

42
00:02:33,110 --> 00:02:31,120
depart the vehicle under our own power

43
00:02:36,470 --> 00:02:33,120
so keeping our muscles strong is a good

44
00:02:37,990 --> 00:02:36,480
thing and so literally we lift weights i

45
00:02:40,309 --> 00:02:38,000
know that sounds funny for a weightless

46
00:02:42,790 --> 00:02:40,319
environment but we have a weightlifting

47
00:02:44,790 --> 00:02:42,800
machine here that we use another force

48
00:02:46,309 --> 00:02:44,800
other than gravity to provide us with

49
00:02:48,390 --> 00:02:46,319
resistance in this case we're lifting

50
00:02:50,630 --> 00:02:48,400
against a vacuum we're pulling plungers

51
00:02:53,190 --> 00:02:50,640
against a vacuum and it we can lift up

52
00:02:55,270 --> 00:02:53,200
to about 500 pounds or so

53
00:02:57,110 --> 00:02:55,280
the equivalent thereof and and the other

54
00:02:59,589 --> 00:02:57,120
thing we do is we exercise by by running

55
00:03:00,949 --> 00:02:59,599
and biking on on machines that let us do

56
00:03:05,350 --> 00:03:00,959
that so that we stay healthy good

57
00:03:09,430 --> 00:03:07,110
my name is rebecca and my question is

58
00:03:11,990 --> 00:03:09,440
for flight engineer naguchi do you have

59
00:03:15,030 --> 00:03:12,000
any superstitions or traditions before

60
00:03:19,670 --> 00:03:17,509
surgery

61
00:03:21,750 --> 00:03:19,680
yeah very uh interesting question yeah

62
00:03:23,670 --> 00:03:21,760
there's a lot of uh the customs or

63
00:03:26,710 --> 00:03:23,680

tradition for launch one thing i

64
00:03:28,869 --> 00:03:26,720
remember for our soyuz launches

65
00:03:31,509 --> 00:03:28,879
before we set up for long trouble

66
00:03:33,830 --> 00:03:31,519
russians have to sit on the on the on

67
00:03:36,550 --> 00:03:33,840
the seat for a very brief amount of time

68
00:03:39,670 --> 00:03:36,560
so we're dressed up and ready for going

69
00:03:42,309 --> 00:03:39,680
to the launch pad uh tj and i both sit

70
00:03:44,070 --> 00:03:42,319
in a small room and sit down and sit and

71
00:03:54,149 --> 00:03:44,080
then set for go so that was an

72
00:03:58,869 --> 00:03:56,789
our names are jonathan emily and this

73
00:04:00,710 --> 00:03:58,879
question is for commander williams what

74
00:04:07,990 --> 00:04:00,720
would you do if you need surgery in

75
00:04:11,509 --> 00:04:10,550
well that's a very good question we have

76
00:04:21,110 --> 00:04:11,519
a

77
00:04:23,510 --> 00:04:21,120
flight surgeons on the ground to help us

78
00:04:25,830 --> 00:04:23,520
out in the case we have a medical

79
00:04:27,110 --> 00:04:25,840
problem an emergency or an illness or

80
00:04:28,710 --> 00:04:27,120
sickness

81
00:04:30,550 --> 00:04:28,720
but we're also

82
00:04:32,230 --> 00:04:30,560
all checked out very thoroughly before

83
00:04:36,550 --> 00:04:32,240
the flight to make sure we're medically

84
00:04:39,430 --> 00:04:36,560
qualified and that really reduces the uh

85
00:04:42,150 --> 00:04:39,440
the chances of having appendicitis for

86
00:04:44,790 --> 00:04:42,160
example as you said but if we if

87
00:04:51,030 --> 00:04:44,800
necessary we are equipped and trained to

88
00:04:55,510 --> 00:04:52,950

my name is brittany and this question is

89
00:05:01,830 --> 00:04:55,520
for flight engineer creamer what do you

90
00:05:06,070 --> 00:05:03,830
well there's a lot of things we do

91
00:05:07,430 --> 00:05:06,080
when we have enough time to do that

92
00:05:09,590 --> 00:05:07,440
if nothing else

93
00:05:11,189 --> 00:05:09,600
there's great views out our window we

94
00:05:13,270 --> 00:05:11,199
can take wonderful pictures and that are

95
00:05:14,550 --> 00:05:13,280
just sometimes all inspiring because

96
00:05:15,909 --> 00:05:14,560
looking out on the earth is just

97
00:05:17,670 --> 00:05:15,919
inspiring

98
00:05:19,430 --> 00:05:17,680
perhaps you've heard several all three

99
00:05:21,590 --> 00:05:19,440
of us have been twittering so we we can

100
00:05:28,469 --> 00:05:21,600
actually surf the internet and find the

101
00:05:33,110 --> 00:05:30,710
my name is sashika and this question is

102
00:05:35,189 --> 00:05:33,120
for flight engineer noguchi

103
00:05:41,990 --> 00:05:35,199
what would happen if you took non-dried

104
00:05:48,310 --> 00:05:44,310
yeah very good question usually we only

105
00:05:50,710 --> 00:05:48,320
have a space food like a can or the

106
00:05:53,029 --> 00:05:50,720
freeze-dried items but when we have a

107
00:05:55,749 --> 00:05:53,039
new space vehicle arriving to the space

108
00:05:57,749 --> 00:05:55,759
station they usually have some kind of

109
00:05:58,550 --> 00:05:57,759
fresh food you know russian usually like

110
00:06:00,950 --> 00:05:58,560
uh

111
00:06:02,870 --> 00:06:00,960
onions or garlics and the space shuttle

112
00:06:04,950 --> 00:06:02,880
usually brings like tomatoes or

113
00:06:06,870 --> 00:06:04,960

grapefruits those kind of things so

114
00:06:09,350 --> 00:06:06,880
we are really looking forward to having

115
00:06:14,629 --> 00:06:09,360
a russian progress vehicle and the space

116
00:06:18,390 --> 00:06:16,230
my name is fabio and this question is

117
00:06:24,710 --> 00:06:18,400
for commander williams does capillary

118
00:06:28,790 --> 00:06:26,550
it does work in microgravity in fact we

119
00:06:30,469 --> 00:06:28,800
use capillary action

120
00:06:32,070 --> 00:06:30,479
you see i've got a medical experiment

121
00:06:34,309 --> 00:06:32,080
strapped on me now

122
00:06:36,309 --> 00:06:34,319
sometimes we have to draw our own blood

123
00:06:37,990 --> 00:06:36,319
and some sometimes we draw a lot of

124
00:06:38,950 --> 00:06:38,000
blood but other times we just prick our

125
00:06:40,790 --> 00:06:38,960
finger

126
00:06:42,790 --> 00:06:40,800
to do a blood test and we use the little

127
00:06:45,430 --> 00:06:42,800
glass tubes and and use capillary

128
00:06:47,029 --> 00:06:45,440
actions to fill the tube

129
00:06:48,790 --> 00:06:47,039
it's actually very interesting because

130
00:06:50,790 --> 00:06:48,800
if you separate out gravity you can do

131
00:06:59,430 --> 00:06:50,800
some very interesting experiment

132
00:07:03,589 --> 00:07:01,350
my name is tyrone and this question is

133
00:07:10,629 --> 00:07:03,599
for flight engineer creamer

134
00:07:14,390 --> 00:07:12,150
that that's a really

135
00:07:16,550 --> 00:07:14,400
very practical question we can't really

136
00:07:18,950 --> 00:07:16,560
take a shower here the way we are

137
00:07:21,270 --> 00:07:18,960
currently configured if if you spray

138
00:07:23,350 --> 00:07:21,280

water water doesn't know how to go down

139
00:07:24,629 --> 00:07:23,360
a drain because there's no up and down

140
00:07:25,909 --> 00:07:24,639
i mean it just goes bouncing all over

141
00:07:27,350 --> 00:07:25,919
the place and that can be bad if the

142
00:07:28,550 --> 00:07:27,360
water goes into electrical circuits and

143
00:07:29,430 --> 00:07:28,560
that kind of stuff so what we end up

144
00:07:30,870 --> 00:07:29,440
doing

145
00:07:32,469 --> 00:07:30,880
is we end up using a little bit of soap

146
00:07:35,110 --> 00:07:32,479
a little bit of shampoo and a little bit

147
00:07:36,309 --> 00:07:35,120
of water and we use basically a

148
00:07:37,029 --> 00:07:36,319
sponge bath

149
00:07:40,390 --> 00:07:37,039
we

150
00:07:42,469 --> 00:07:40,400
down

151
00:07:47,909 --> 00:07:42,479
we are not quite ready yet to do actual

152
00:07:52,469 --> 00:07:49,990
my name is alex and this question is for

153
00:07:54,390 --> 00:07:52,479
flight engineer naguchi

154
00:07:58,629 --> 00:07:54,400
how do you clean the space station when

155
00:08:00,710 --> 00:07:58,639
all the particles are floating around

156
00:08:02,950 --> 00:08:00,720
floating around

157
00:08:05,350 --> 00:08:02,960
yeah very important question uh

158
00:08:07,749 --> 00:08:05,360
we usually do the cleaning

159
00:08:09,589 --> 00:08:07,759
saturday morning and we have a special

160
00:08:12,550 --> 00:08:09,599
vacuum cleaner

161
00:08:15,830 --> 00:08:12,560
and usually all the dust are usually

162
00:08:17,909 --> 00:08:15,840
collected in the air intake of the

163
00:08:20,469 --> 00:08:17,919

air conditioner so everything all the

164
00:08:22,309 --> 00:08:20,479
small particles up to like spoons

165
00:08:30,790 --> 00:08:22,319
everything goes to the the filter so

166
00:08:36,550 --> 00:08:33,350
hi my name is shiva priya and this

167
00:08:38,829 --> 00:08:36,560
question is for commander williams

168
00:08:42,949 --> 00:08:38,839
have you ever worked with animals in

169
00:08:49,509 --> 00:08:42,959
space and if so what kind of experiments

170
00:08:55,269 --> 00:08:52,150
well we have had animals in space just a

171
00:08:58,150 --> 00:08:55,279
couple of months ago we sent home some

172
00:08:59,829 --> 00:08:58,160
mice that were up here for oh three or

173
00:09:01,269 --> 00:08:59,839
four months or so

174
00:09:02,470 --> 00:09:01,279
and the experiment that we were doing

175
00:09:05,030 --> 00:09:02,480
with them they

176
00:09:07,269 --> 00:09:05,040
had to do with bone loss

177
00:09:08,710 --> 00:09:07,279
or bone density loss you know that's one

178
00:09:10,310 --> 00:09:08,720
of the things that we're very interested

179
00:09:12,230 --> 00:09:10,320
in in a weightless environment our bones

180
00:09:13,910 --> 00:09:12,240
get weaker because the calcium leeches

181
00:09:16,070 --> 00:09:13,920
out of our bones and we want to

182
00:09:17,910 --> 00:09:16,080
understand that process so we can

183
00:09:21,030 --> 00:09:17,920
prevent it from happening

184
00:09:23,350 --> 00:09:21,040
for future long duration flights to

185
00:09:25,990 --> 00:09:23,360
back to the moon or even to places like

186
00:09:28,310 --> 00:09:26,000
mars so that's one recent example that

187
00:09:29,670 --> 00:09:28,320
we've had that we've all had also had

188
00:09:32,389 --> 00:09:29,680

small

189
00:09:34,470 --> 00:09:32,399
microorganisms

190
00:09:37,190 --> 00:09:34,480
studying dna and the effects of

191
00:09:38,630 --> 00:09:37,200
weightlessness on the formation of of

192
00:09:40,150 --> 00:09:38,640
dna

193
00:09:43,190 --> 00:09:40,160
and you might have heard recently in the

194
00:09:45,430 --> 00:09:43,200
news that we hatched out some

195
00:09:47,829 --> 00:09:45,440
caterpillars which eventually turned

196
00:09:49,430 --> 00:09:47,839
into butterflies and we observed them go

197
00:09:55,190 --> 00:09:49,440
through their transformation in this

198
00:09:59,829 --> 00:09:57,509
my name is blake and this question is

199
00:10:01,990 --> 00:09:59,839
for flight engineer creamer

200
00:10:09,430 --> 00:10:02,000
how do you get in and out of the space

201
00:10:14,389 --> 00:10:13,030
that is an extremely important question

202
00:10:15,910 --> 00:10:14,399
when the shuttle comes up and you get to

203
00:10:18,790 --> 00:10:15,920
watch what's going on you'll see a

204
00:10:20,870 --> 00:10:18,800
couple of spacewalks going on and i

205
00:10:22,470 --> 00:10:20,880
think they're doing three total

206
00:10:24,230 --> 00:10:22,480
and what those guys do when they go

207
00:10:26,150 --> 00:10:24,240
outside is they go into a tiny little

208
00:10:27,990 --> 00:10:26,160
room and close the door and that tiny

209
00:10:30,470 --> 00:10:28,000
little room is called an airlock

210
00:10:32,630 --> 00:10:30,480
and when they go into that airlock

211
00:10:34,550 --> 00:10:32,640
it's just about big enough to fit two

212
00:10:36,310 --> 00:10:34,560
guys

213
00:10:38,230 --> 00:10:36,320

in their spacesuits and the equipment so

214
00:10:40,150 --> 00:10:38,240
it's not a whole lot of air

215
00:10:42,230 --> 00:10:40,160
that's left in there and when we close

216
00:10:44,069 --> 00:10:42,240
that second door we end up pumping out

217
00:10:46,069 --> 00:10:44,079
the air back into space station so we

218
00:10:47,990 --> 00:10:46,079
don't lose that air out into space and

219
00:10:50,150 --> 00:10:48,000
then just the very last little bit when

220
00:10:51,829 --> 00:10:50,160
they open up the door to go outside

221
00:10:53,350 --> 00:10:51,839
into space is what that little tiny

222
00:10:55,430 --> 00:10:53,360
little bit of air is what we lose so we

223
00:11:02,550 --> 00:10:55,440
we tried our best to retain all the air

224
00:11:07,509 --> 00:11:04,470
my name is billy and this question is

225
00:11:14,310 --> 00:11:07,519
for flight engineer naguchi do you think

226
00:11:20,150 --> 00:11:17,350
uh absolutely not actually uh the

227
00:11:22,790 --> 00:11:20,160
launching and landing is both fun i flew

228
00:11:25,110 --> 00:11:22,800
in space shuttle uh five years ago and

229
00:11:27,430 --> 00:11:25,120
that time both landing

230
00:11:29,590 --> 00:11:27,440
launching and landing was extremely fun

231
00:11:32,470 --> 00:11:29,600
and i'm i'm really looking forward to

232
00:11:38,550 --> 00:11:32,480
the soyuz spacecraft landing this time

233
00:11:44,790 --> 00:11:41,030
our names are arushi and noah and this

234
00:11:47,430 --> 00:11:44,800
question is for commander williams

235
00:11:49,350 --> 00:11:47,440
what kind of emergencies do you face on

236
00:11:54,389 --> 00:11:49,360
the space station and how might you

237
00:11:58,710 --> 00:11:56,710
that's another great question we uh have

238
00:12:01,990 --> 00:11:58,720

three types of emergencies that we

239
00:12:04,310 --> 00:12:02,000
prepare a lot for one is a fire

240
00:12:06,629 --> 00:12:04,320
another one is a depressurization or a

241
00:12:09,910 --> 00:12:06,639
leak and then the third one is some kind

242
00:12:11,590 --> 00:12:09,920
of a poisonous spill or toxic spill into

243
00:12:13,910 --> 00:12:11,600
the atmosphere all three things would be

244
00:12:15,750 --> 00:12:13,920
very bad for us so we do a lot to

245
00:12:18,470 --> 00:12:15,760
prepare for those we have equipment on

246
00:12:19,590 --> 00:12:18,480
board we have engineers and teams on the

247
00:12:20,949 --> 00:12:19,600
ground

248
00:12:24,230 --> 00:12:20,959
that help

249
00:12:26,230 --> 00:12:24,240
prepare the equipment and the procedures

250
00:12:28,790 --> 00:12:26,240
to deal with those things

251
00:12:31,350 --> 00:12:28,800
we have had a couple of false alarms and

252
00:12:34,150 --> 00:12:31,360
minor incidences related to that in the

253
00:12:36,629 --> 00:12:34,160
history of the space station

254
00:12:38,389 --> 00:12:36,639
and so we have had to respond and

255
00:12:40,629 --> 00:12:38,399
thankfully they've been either minor or

256
00:12:42,389 --> 00:12:40,639
false alarms we think we're in pretty

257
00:12:44,230 --> 00:12:42,399
good shape though to handle those things

258
00:12:45,829 --> 00:12:44,240
but those are the those are the kinds of

259
00:12:47,590 --> 00:12:45,839
emergencies that we would

260
00:12:53,829 --> 00:12:47,600
be most concerned about on board the

261
00:12:58,710 --> 00:12:56,230
my name is wesley and this question is

262
00:13:01,350 --> 00:12:58,720
for flight engineer creamer

263
00:13:04,230 --> 00:13:01,360

how fast does the iss travel around the

264
00:13:09,990 --> 00:13:04,240
earth and is it the same speed as the

265
00:13:13,829 --> 00:13:12,150
good a good physics question

266
00:13:15,910 --> 00:13:13,839
um i can answer it a couple different

267
00:13:17,430 --> 00:13:15,920
ways in the first way i can answer it

268
00:13:19,829 --> 00:13:17,440
it's probably the best for you guys to

269
00:13:23,350 --> 00:13:19,839
understand how fast we're moving we go

270
00:13:24,310 --> 00:13:23,360
around the earth about every 90 minutes

271
00:13:26,069 --> 00:13:24,320
and so

272
00:13:27,910 --> 00:13:26,079
that should answer the second question

273
00:13:29,750 --> 00:13:27,920
we don't rotate as fast we actually

274
00:13:31,750 --> 00:13:29,760
rotate faster

275
00:13:32,949 --> 00:13:31,760
and then to give you a miles an hour

276
00:13:37,269 --> 00:13:32,959
we're

277
00:13:39,189 --> 00:13:37,279
here or just outside the atmosphere area

278
00:13:41,189 --> 00:13:39,199
at about 17

279
00:13:49,110 --> 00:13:41,199
500 miles an hour which is about five

280
00:13:53,269 --> 00:13:50,870
my name is patrick and this question is

281
00:13:55,030 --> 00:13:53,279
for flight engineer naguchi

282
00:13:57,350 --> 00:13:55,040
given the effects of low gravity on the

283
00:13:59,430 --> 00:13:57,360
human body will it be possible to live

284
00:14:04,629 --> 00:13:59,440
for extended periods in colonies on

285
00:14:08,550 --> 00:14:06,470
yeah very good question and i i think

286
00:14:11,110 --> 00:14:08,560
the answer is yes so uh now the

287
00:14:13,670 --> 00:14:11,120
commander williams is here for 120 days

288
00:14:16,710 --> 00:14:13,680

and we're in space like 40 days and

289
00:14:19,030 --> 00:14:16,720
we're every day exercising to counteract

290
00:14:21,829 --> 00:14:19,040
with you know bone loss and

291
00:14:24,150 --> 00:14:21,839
muscle loss and i think in the future uh

292
00:14:27,030 --> 00:14:24,160
mankind can expand their possibility

293
00:14:34,470 --> 00:14:27,040
beyond the lowers orbit into moon or

294
00:14:38,150 --> 00:14:36,230
my name is rodwell and this question is

295
00:14:40,550 --> 00:14:38,160
for commander williams do you have to

296
00:14:45,910 --> 00:14:40,560
drive this space station while it's in

297
00:14:49,910 --> 00:14:48,150
well thankfully the computers do most of

298
00:14:52,150 --> 00:14:49,920
that for us and we have flight

299
00:14:53,430 --> 00:14:52,160
controllers on the ground both in moscow

300
00:14:55,750 --> 00:14:53,440
and houston

301
00:14:57,110 --> 00:14:55,760
that work together and coordinate with

302
00:14:59,829 --> 00:14:57,120
each other

303
00:15:01,189 --> 00:14:59,839
to keep the computers programmed for the

304
00:15:02,550 --> 00:15:01,199
different maneuvers and the different

305
00:15:04,389 --> 00:15:02,560
attitudes that the

306
00:15:06,389 --> 00:15:04,399
space station has to be in

307
00:15:13,590 --> 00:15:06,399
so for the most part we're hands off

308
00:15:17,910 --> 00:15:15,590
my name is mallory and this question is

309
00:15:20,150 --> 00:15:17,920
for flight engineer creamer how is the

310
00:15:26,470 --> 00:15:20,160
social aspect of life on the iss

311
00:15:30,230 --> 00:15:27,990
well the first thing i should say is

312
00:15:31,910 --> 00:15:30,240
there are a lot of similarities um

313
00:15:33,110 --> 00:15:31,920

we are a crew of five our two russian

314
00:15:34,150 --> 00:15:33,120
crewmates are at the other end of the

315
00:15:35,670 --> 00:15:34,160
moment

316
00:15:38,790 --> 00:15:35,680
and

317
00:15:40,870 --> 00:15:38,800
our job on on board is to make sure that

318
00:15:43,430 --> 00:15:40,880
our operations our mission is successful

319
00:15:45,189 --> 00:15:43,440
and part of that is working with all our

320
00:15:47,590 --> 00:15:45,199
friends the three of us and then our two

321
00:15:49,509 --> 00:15:47,600
russian compadres

322
00:15:51,990 --> 00:15:49,519
so that interaction is just like we do

323
00:15:54,389 --> 00:15:52,000
on earth when we work as a team together

324
00:15:56,710 --> 00:15:54,399
the uniqueness of being up here is we

325
00:15:58,629 --> 00:15:56,720
get to share an experience that not many

326
00:15:59,829 --> 00:15:58,639
people get to get to

327
00:16:01,030 --> 00:15:59,839
to do

328
00:16:02,470 --> 00:16:01,040
accomplish

329
00:16:04,470 --> 00:16:02,480
and we can also look out the window and

330
00:16:07,110 --> 00:16:04,480
look on the earth that is just amazing

331
00:16:09,509 --> 00:16:07,120
to see from this perspective but also we

332
00:16:12,790 --> 00:16:09,519
can't go away from station so we have to

333
00:16:15,910 --> 00:16:12,800
kind of invent our own uh humor our own

334
00:16:17,670 --> 00:16:15,920
diversions and our own sharings um and

335
00:16:18,949 --> 00:16:17,680
as a result of that because we are

336
00:16:20,629 --> 00:16:18,959
isolated like this it's a little bit

337
00:16:25,990 --> 00:16:20,639
different than the social aspects on

338
00:16:30,870 --> 00:16:27,910

my name is catherine and this question

339
00:16:33,430 --> 00:16:30,880
is for flight engineer naguchi

340
00:16:36,629 --> 00:16:33,440
when when you come back to earth after

341
00:16:37,590 --> 00:16:36,639
being in space for so long do you feel

342
00:16:44,310 --> 00:16:37,600
dizzy

343
00:16:46,230 --> 00:16:44,320
or heavy or anything unusual

344
00:16:49,030 --> 00:16:46,240
yeah very good question

345
00:16:51,829 --> 00:16:49,040
i remember last time i flew to space and

346
00:16:55,189 --> 00:16:51,839
come back i feel like uh

347
00:16:58,230 --> 00:16:55,199
you know my uh gravity sensing uh

348
00:17:00,790 --> 00:16:58,240
function is very reduced so uh like

349
00:17:03,590 --> 00:17:00,800
every time i turn my head left and right

350
00:17:06,069 --> 00:17:03,600
i feel like the whole world is spinning

351
00:17:08,549 --> 00:17:06,079
and that kind of sensation lasts like

352
00:17:11,350 --> 00:17:08,559
like a week or so and after that we

353
00:17:14,230 --> 00:17:11,360
can re-adapt it back to the 1g so

354
00:17:15,590 --> 00:17:14,240
i am expecting the same type of effect

355
00:17:22,390 --> 00:17:15,600
when i come back

356
00:17:26,630 --> 00:17:24,230
my name is brad and this question is for

357
00:17:28,309 --> 00:17:26,640
commander williams would a small fire

358
00:17:33,350 --> 00:17:28,319
spread in the space station or would it

359
00:17:38,310 --> 00:17:36,470
well the space station is designed uh to

360
00:17:41,029 --> 00:17:38,320
contain fires actually it's designed

361
00:17:43,830 --> 00:17:41,039
first to prevent fires and then if one

362
00:17:45,830 --> 00:17:43,840
were to occur to uh to contain it as you

363
00:17:49,029 --> 00:17:45,840

know a fire needs an ignition source

364
00:17:50,950 --> 00:17:49,039
fuel and oxygen our oxygen levels are

365
00:17:53,350 --> 00:17:50,960
the same as what you're breathing right

366
00:17:54,710 --> 00:17:53,360
now down there so they're not so high

367
00:17:56,150 --> 00:17:54,720
that uh

368
00:18:00,789 --> 00:17:56,160
to

369
00:18:03,590 --> 00:18:00,799
from the oxygen

370
00:18:05,350 --> 00:18:03,600
most of the materials on board are not

371
00:18:07,110 --> 00:18:05,360
prone to burn

372
00:18:09,430 --> 00:18:07,120
so we don't have a lot of what you would

373
00:18:12,390 --> 00:18:09,440
call fuel on board

374
00:18:15,270 --> 00:18:12,400
and we try to keep iso or ignition

375
00:18:17,510 --> 00:18:15,280
sources from from being exposed

376
00:18:19,430 --> 00:18:17,520
to potential fuels and oxygen so you

377
00:18:20,710 --> 00:18:19,440
know if we were to have a fire most you

378
00:18:22,150 --> 00:18:20,720
know most likely if we were to have

379
00:18:23,990 --> 00:18:22,160
something it would be an electrical

380
00:18:25,830 --> 00:18:24,000
short or something like that

381
00:18:28,789 --> 00:18:25,840
the systems are designed to remove the

382
00:18:31,110 --> 00:18:28,799
electricity to cut off oxygen sources we

383
00:18:31,830 --> 00:18:31,120
do have oxygen lines they would be cut

384
00:18:34,470 --> 00:18:31,840
off

385
00:18:36,549 --> 00:18:34,480
just in case it was an oxygen fire

386
00:18:38,390 --> 00:18:36,559
it wouldn't continue to be fed

387
00:18:39,909 --> 00:18:38,400
so like i said we're in pretty good

388
00:18:45,350 --> 00:18:39,919

shape system wise

389
00:18:49,590 --> 00:18:47,350
my name is yemen and this question is

390
00:18:51,510 --> 00:18:49,600
for flight engineer creamer what is the

391
00:18:57,830 --> 00:18:51,520
most unexpected thing you have seen

392
00:19:02,230 --> 00:19:01,190
most unexpected thing i've seen well

393
00:19:04,230 --> 00:19:02,240
maybe i should tell you about the most

394
00:19:07,430 --> 00:19:04,240
unexpected thing that i'm aware of that

395
00:19:08,950 --> 00:19:07,440
has happened up here um we when we sleep

396
00:19:10,470 --> 00:19:08,960
we don't lay down because there's no up

397
00:19:11,350 --> 00:19:10,480
and down we actually

398
00:19:12,789 --> 00:19:11,360
sleep

399
00:19:14,470 --> 00:19:12,799
in this orientation that we're standing

400
00:19:15,590 --> 00:19:14,480
right now or floating right now in a

401
00:19:17,830 --> 00:19:15,600
sleeping bag

402
00:19:19,750 --> 00:19:17,840
but after you've been asleep for a while

403
00:19:22,230 --> 00:19:19,760
you kind of feel like you're laying down

404
00:19:23,990 --> 00:19:22,240
and then when my alarm goes off and my

405
00:19:25,029 --> 00:19:24,000
alarm clock is right here right next to

406
00:19:27,430 --> 00:19:25,039
my ear

407
00:19:29,590 --> 00:19:27,440
i still have this desire to sit up and

408
00:19:32,070 --> 00:19:29,600
when i sit up i'm looking now to my

409
00:19:34,070 --> 00:19:32,080
right to find the alarm and even though

410
00:19:36,310 --> 00:19:34,080
i'm sleeping in basically the size of a

411
00:19:38,549 --> 00:19:36,320
telephone booth i'm lost completely in

412
00:19:40,390 --> 00:19:38,559
the dark i can't find my alarm it's just

413
00:19:41,590 --> 00:19:40,400

that orientation change

414
00:19:43,270 --> 00:19:41,600
and it's happened i've been here for a

415
00:19:45,270 --> 00:19:43,280
month and it's happened every morning

416
00:19:51,029 --> 00:19:45,280
the alarm's gone off i can't find my

417
00:19:55,510 --> 00:19:53,110
well to everyone involved this has been

418
00:19:57,590 --> 00:19:55,520
a once-in-a-lifetime experience for us

419
00:19:59,990 --> 00:19:57,600
our thoughts will be with you always and

420
00:20:02,230 --> 00:20:00,000
we appreciate your service on behalf of

421
00:20:15,669 --> 00:20:02,240
our community and our nation thank you

422
00:20:19,270 --> 00:20:17,350
thank you very much for coming on board

423
00:20:22,070 --> 00:20:19,280
today it was a pleasure to have you join

424
00:20:24,470 --> 00:20:22,080
us and we wish you all the best and kids

425
00:20:26,310 --> 00:20:24,480
study hard