1
00:00:05,670 --> 00:00:03,909
atlantis iss this is houston are you

2
00:00:09,910 --> 00:00:05,680
ready for the event on space to ground

3
00:00:09,920 --> 00:00:19,429
we are ready for the event

4
00:00:24,230 --> 00:00:22,310
atlantis iss this is houston acr please

5
00:00:34,870 --> 00:00:24,240
stand by for the nasa summer of

6
00:00:39,430 --> 00:00:37,110
our question is

7
00:00:45,029 --> 00:00:39,440
how do you feel of this being your last

8
00:00:48,709 --> 00:00:46,549
well thank you for that uh great

9
00:00:49,910 --> 00:00:48,719
question from burbank middle school

10
00:00:57,189 --> 00:00:49,920
uh

11
00:00:59,349 --> 00:00:57,199
can't fly in space again there's to be

12
00:01:01,670 --> 00:00:59,359
lots of opportunities we're still flying

13
00:01:03,189 --> 00:01:01,680

folks aboard russian soyuz rockets to

14
00:01:04,310 --> 00:01:03,199
the space station

15
00:01:06,550 --> 00:01:04,320
and

16
00:01:09,109 --> 00:01:06,560
we've got some commercial companies that

17
00:01:10,950 --> 00:01:09,119
are building rockets now so maybe a ride

18
00:01:13,670 --> 00:01:10,960
on one of their rockets in the near

19
00:01:14,710 --> 00:01:13,680
future and then nasa's uh in the process

20
00:01:16,390 --> 00:01:14,720
of

21
00:01:19,030 --> 00:01:16,400
building a new rocket that will go

22
00:01:21,350 --> 00:01:19,040
outside of uh earth's orbit perhaps to

23
00:01:24,149 --> 00:01:21,360
the moon or mars so gonna be a lot of

24
00:01:26,630 --> 00:01:24,159
great opportunities to uh fly in space

25
00:01:32,310 --> 00:01:26,640
for the foreseeable future

26
00:01:36,310 --> 00:01:34,310
hi my name is maurice

27
00:01:39,590 --> 00:01:36,320
i go to galveston early college high

28
00:01:44,149 --> 00:01:39,600
school and my question is are the

29
00:01:47,830 --> 00:01:46,149
well thanks maurice actually spacesuits

30
00:01:50,069 --> 00:01:47,840
aren't itchy even the ones when we go

31
00:01:52,550 --> 00:01:50,079
out and do a spacewalk we have a nice

32
00:01:54,469 --> 00:01:52,560
smooth undergarment we wear there and it

33
00:01:56,310 --> 00:01:54,479
it's not itchy at all and

34
00:01:58,149 --> 00:01:56,320
it it also has water tubes in it that

35
00:02:00,069 --> 00:01:58,159
can that go up and down and keep you

36
00:02:01,270 --> 00:02:00,079
cool because obviously you get a little

37
00:02:03,350 --> 00:02:01,280
bit hot when you're out there working

38
00:02:05,109 --> 00:02:03,360

real hard but they're pretty comfortable

39
00:02:08,070 --> 00:02:05,119
and they got to be because when we go on

40
00:02:09,669 --> 00:02:08,080
a spacewalk we can wear them for about

41
00:02:10,869 --> 00:02:09,679
six and a half seven hours for the space

42
00:02:12,710 --> 00:02:10,879
walk and then a couple hours getting

43
00:02:14,390 --> 00:02:12,720
ready so it's a long day inside that

44
00:02:20,710 --> 00:02:14,400
space suit you certainly wouldn't want

45
00:02:25,190 --> 00:02:22,630
hi my name is race and i'm from las

46
00:02:27,670 --> 00:02:25,200
cruces new mexico and i was wondering

47
00:02:30,070 --> 00:02:27,680
how you guys replace the air that gets

48
00:02:31,509 --> 00:02:30,080
lost in the air locks when you're moving

49
00:02:37,509 --> 00:02:31,519
in and out and get that get soaked

50
00:02:40,710 --> 00:02:39,190
well race that is a very important issue

51
00:02:42,309 --> 00:02:40,720
when we do a spacewalk we don't want to

52
00:02:44,550 --> 00:02:42,319
let too much air get outside of the

53
00:02:46,550 --> 00:02:44,560
vehicle so what we do is uh before we go

54
00:02:48,790 --> 00:02:46,560
out and do a spacewalk we

55
00:02:50,869 --> 00:02:48,800
we go into a small room called an

56
00:02:52,229 --> 00:02:50,879
airlock and once we get into the airlock

57
00:02:53,990 --> 00:02:52,239
when you're inside our spacesuits we

58
00:02:56,630 --> 00:02:54,000
close the door behind us and then we let

59
00:02:58,630 --> 00:02:56,640
the air just out of that small room and

60
00:02:59,910 --> 00:02:58,640
then once that room small room is at

61
00:03:01,990 --> 00:02:59,920
vacuum then we can go out a different

62
00:03:04,550 --> 00:03:02,000
door and then we can go into our space

63
00:03:07,350 --> 00:03:04,560

walk then but the uh when we do come

64
00:03:08,630 --> 00:03:07,360
back in we do the process in reverse and

65
00:03:10,229 --> 00:03:08,640
then the question is where do we get the

66
00:03:11,830 --> 00:03:10,239
extra airform that we lost we don't lose

67
00:03:13,350 --> 00:03:11,840
too much but when we do lose a little

68
00:03:23,589 --> 00:03:13,360
bit of air we bring some up with our

69
00:03:35,190 --> 00:03:27,190
hello my name is alexis um where should

70
00:03:41,509 --> 00:03:38,710
thanks alexis and the 2011 robocamp

71
00:03:44,309 --> 00:03:41,519
that's a great question um

72
00:03:47,589 --> 00:03:44,319
i think uh me personally i would love to

73
00:03:49,750 --> 00:03:47,599
go to mars but uh an asteroid or the

74
00:03:51,910 --> 00:03:49,760
moon would be very exciting as well

75
00:03:53,350 --> 00:03:51,920
because we've uh we've done

76
00:03:56,390 --> 00:03:53,360
some exploration of the moon if you

77
00:03:59,030 --> 00:03:56,400
remember way back in the 60s and 70s but

78
00:04:00,470 --> 00:03:59,040
we've got a long way to go there but if

79
00:04:01,589 --> 00:04:00,480
i had a choice i would love to go to

80
00:04:06,309 --> 00:04:01,599
mars

81
00:04:12,550 --> 00:04:10,070
hi my name is uh i go to parker but i

82
00:04:13,429 --> 00:04:12,560
came here to hillary morgan my question

83
00:04:19,990 --> 00:04:13,439
is

84
00:04:24,469 --> 00:04:22,150
well actually there's a small bits of

85
00:04:25,830 --> 00:04:24,479
old rocket parts or satellites and stuff

86
00:04:28,469 --> 00:04:25,840
like that so there are very very many

87
00:04:30,550 --> 00:04:28,479
there's probably over a thousand and uh

88
00:04:32,230 --> 00:04:30,560

what uh what we do is if a big piece

89
00:04:33,909 --> 00:04:32,240
comes toward the space station we will

90
00:04:35,430 --> 00:04:33,919
maneuver the space station change the

91
00:04:37,270 --> 00:04:35,440
orbit a little bit so that the piece of

92
00:04:39,510 --> 00:04:37,280
debris won't hit us now there's also

93
00:04:41,510 --> 00:04:39,520
little tiny specks and those we can't

94
00:04:42,950 --> 00:04:41,520
really see so if they hit us we have

95
00:04:52,950 --> 00:04:42,960
shielding on the outside so it shouldn't

96
00:05:02,870 --> 00:04:55,590
our question is what's going to happen

97
00:05:07,029 --> 00:05:05,029
actually uh thanks for that question

98
00:05:09,430 --> 00:05:07,039
nasa will be around for a long time to

99
00:05:12,550 --> 00:05:09,440
come you know we will finish up the

100
00:05:14,230 --> 00:05:12,560
shuttle uh program uh here in just a few

101
00:05:16,550 --> 00:05:14,240
days and then

102
00:05:19,749 --> 00:05:16,560
we embark on our next adventure which is

103
00:05:23,430 --> 00:05:19,759
going beyond the orbit of the earth to a

104
00:05:25,749 --> 00:05:23,440
mars or an asteroid or to the moon

105
00:05:27,189 --> 00:05:25,759
so we've got plenty to do we're going to

106
00:05:28,950 --> 00:05:27,199
continue to fly up here on the

107
00:05:31,510 --> 00:05:28,960
international space station for at least

108
00:05:33,830 --> 00:05:31,520
the next 10 years or so so

109
00:05:38,950 --> 00:05:33,840
we'll have crews always up here

110
00:05:43,430 --> 00:05:40,950
hi my name is austin wright at weiss

111
00:05:45,430 --> 00:05:43,440
middle school in galveston texas my

112
00:05:50,390 --> 00:05:45,440
question is what kinds of food do you

113
00:05:54,070 --> 00:05:52,390

well that's a very good question austin

114
00:05:56,230 --> 00:05:54,080
just so happens you caught us just

115
00:05:58,870 --> 00:05:56,240
before lunch so we can show you a little

116
00:06:00,390 --> 00:05:58,880
bit of what we have here in space uh you

117
00:06:03,029 --> 00:06:00,400
can eat lots of different kinds of food

118
00:06:06,390 --> 00:06:03,039
some of it is dehydrated for instance uh

119
00:06:08,230 --> 00:06:06,400
this is actually some spaghetti and

120
00:06:10,230 --> 00:06:08,240
you can also have some stuff that comes

121
00:06:11,510 --> 00:06:10,240
in pouches that's kind of just basically

122
00:06:13,830 --> 00:06:11,520
ready to eat

123
00:06:15,189 --> 00:06:13,840
so you can have

124
00:06:19,510 --> 00:06:15,199
you can have vanilla pudding for

125
00:06:24,550 --> 00:06:21,430
or you can uh you can have some of your

126
00:06:26,550 --> 00:06:24,560
old favorites too like scrambled eggs

127
00:06:28,150 --> 00:06:26,560
and a lot of these require just adding

128
00:06:29,830 --> 00:06:28,160
some water and so you'll see they don't

129
00:06:31,590 --> 00:06:29,840
look necessarily like scrambled eggs yet

130
00:06:33,909 --> 00:06:31,600
but they will and they can be pretty

131
00:06:35,670 --> 00:06:33,919
good now the important question is is

132
00:06:37,909 --> 00:06:35,680
how do you know whose food is whose well

133
00:06:39,990 --> 00:06:37,919
it's very important we have color codes

134
00:06:42,790 --> 00:06:40,000
so doug as the pilot of atlantis his

135
00:06:46,150 --> 00:06:42,800
color code is yellow and the commander

136
00:06:47,990 --> 00:06:46,160
is red now i see uh doug here has got

137
00:06:49,749 --> 00:06:48,000
the commander scrambled eggs so let's

138
00:06:51,749 --> 00:06:49,759

not tell the commander that doug stole

139
00:06:53,350 --> 00:06:51,759
the scrambled eggs so you got to be

140
00:06:55,189 --> 00:06:53,360
careful about that now we also got a

141
00:06:56,469 --> 00:06:55,199
drink too so what we have is these drink

142
00:06:58,070 --> 00:06:56,479
bags here

143
00:06:59,670 --> 00:06:58,080
and on these drink bags they're just

144
00:07:01,589 --> 00:06:59,680
they're very easy to use you just pop a

145
00:07:03,430 --> 00:07:01,599
straw in there

146
00:07:04,950 --> 00:07:03,440
and then you can drink so it works out

147
00:07:06,710 --> 00:07:04,960
great this is for instance strawberry

148
00:07:09,029 --> 00:07:06,720
drink you pop a straw in there and you

149
00:07:10,870 --> 00:07:09,039
can sip it and it tastes great

150
00:07:12,150 --> 00:07:10,880
and the important thing though about

151
00:07:14,790 --> 00:07:12,160
drinks if you just float them around

152
00:07:16,469 --> 00:07:14,800
with the straw open then the the drink

153
00:07:18,150 --> 00:07:16,479
can float all around and get all over

154
00:07:19,510 --> 00:07:18,160
the all over the walls of the space

155
00:07:21,189 --> 00:07:19,520
station so you got to be very careful

156
00:07:23,670 --> 00:07:21,199
and they have a special valve on the top

157
00:07:25,749 --> 00:07:23,680
so you can close them off when they uh

158
00:07:27,110 --> 00:07:25,759
when you're not using them now also of

159
00:07:28,950 --> 00:07:27,120
course we have some we have to have some

160
00:07:30,870 --> 00:07:28,960
treats too so

161
00:07:33,270 --> 00:07:30,880
and uh i think you guys will recognize

162
00:07:35,110 --> 00:07:33,280
these some uh candy-coated chocolates so

163
00:07:37,110 --> 00:07:35,120

it's always fun to have a little bit of

164
00:07:39,110 --> 00:07:37,120
a little bit of candy also too and it's

165
00:07:41,270 --> 00:07:39,120
uh it's fun to eat too because you can

166
00:07:42,629 --> 00:07:41,280
you can shoot them at each other so so

167
00:07:44,309 --> 00:07:42,639
you caught us at the right time just

168
00:07:51,270 --> 00:07:44,319
about just about lunchtime those kind of

169
00:07:55,270 --> 00:07:53,110
my name is anthony tong and i go to

170
00:07:56,869 --> 00:07:55,280
galveston college high school and i

171
00:08:01,029 --> 00:07:56,879
wanted to know if you ever get bored in

172
00:08:05,990 --> 00:08:03,430
well thanks for that question maurice uh

173
00:08:08,309 --> 00:08:06,000
no we definitely

174
00:08:10,629 --> 00:08:08,319
don't get bored up here on the space

175
00:08:11,510 --> 00:08:10,639
station or on the space shuttle we've

176
00:08:13,909 --> 00:08:11,520
got

177
00:08:16,070 --> 00:08:13,919
plenty to do uh while we're up here

178
00:08:17,350 --> 00:08:16,080
during the mission resupplying the space

179
00:08:19,589 --> 00:08:17,360
station or

180
00:08:21,990 --> 00:08:19,599
maintaining the space shuttle

181
00:08:24,550 --> 00:08:22,000
and then if uh we happen to get all our

182
00:08:26,869 --> 00:08:24,560
work done maybe uh before we go to sleep

183
00:08:28,469 --> 00:08:26,879
at night we we can take a chance take a

184
00:08:30,309 --> 00:08:28,479
few minutes to look out the one of the

185
00:08:32,149 --> 00:08:30,319
windows here out of the cupola which has

186
00:08:33,670 --> 00:08:32,159
got several windows so

187
00:08:39,990 --> 00:08:33,680
the last thing you do

188
00:08:43,829 --> 00:08:42,230

hi my name is thomas and my question is

189
00:08:47,829 --> 00:08:43,839
do you feel heavy when you get back down

190
00:08:52,070 --> 00:08:49,750
well as a matter of fact thomas when we

191
00:08:53,590 --> 00:08:52,080
get back to earth we do feel heavy right

192
00:08:55,350 --> 00:08:53,600
now we're floating in zero gravity so

193
00:08:56,470 --> 00:08:55,360
it's very comfortable it's a kind of

194
00:08:58,389 --> 00:08:56,480
like you've ever had a dream that you

195
00:08:59,910 --> 00:08:58,399
can fly that's just what it's like and

196
00:09:01,590 --> 00:08:59,920
it's so exciting to be able to fly

197
00:09:03,750 --> 00:09:01,600
around like superman here in the space

198
00:09:05,430 --> 00:09:03,760
station it's a lot of fun then when you

199
00:09:07,990 --> 00:09:05,440
get back to earth boy you pay the price

200
00:09:09,590 --> 00:09:08,000
because you feel really really heavy but

201
00:09:11,030 --> 00:09:09,600
you got to remember if you wake up late

202
00:09:12,310 --> 00:09:11,040
at night or something and get out of bed

203
00:09:13,590 --> 00:09:12,320
that you're not back on the space

204
00:09:14,710 --> 00:09:13,600
station because if you if you think

205
00:09:16,389 --> 00:09:14,720
you're back on the space station you'll

206
00:09:17,990 --> 00:09:16,399
jump out of bed try to float to go to

207
00:09:20,150 --> 00:09:18,000
another room and you'll end up on the

208
00:09:24,710 --> 00:09:20,160
floor so you feel very very heavy when

209
00:09:31,190 --> 00:09:27,590
i'm renee and i'm stephen and we're from

210
00:09:34,790 --> 00:09:31,200
las vegas new mexico our question is

211
00:09:40,470 --> 00:09:34,800
that if you can text or email in space

212
00:09:44,389 --> 00:09:42,470
well thanks for that question renee and

213
00:09:47,190 --> 00:09:44,399

steven uh

214
00:09:49,590 --> 00:09:47,200
we can't really text but we we have

215
00:09:52,470 --> 00:09:49,600
email and we're able to send email to

216
00:09:54,870 --> 00:09:52,480
our friends and family or co-workers so

217
00:09:59,430 --> 00:09:54,880
we have that we uh

218
00:10:01,509 --> 00:09:59,440
we can watch uh dvds uh on uh some of

219
00:10:03,670 --> 00:10:01,519
the laptop computers but we don't

220
00:10:05,350 --> 00:10:03,680
actually have tv up here so we we do

221
00:10:07,509 --> 00:10:05,360
have a lot of the

222
00:10:09,590 --> 00:10:07,519
the things that you have on earth but uh

223
00:10:12,710 --> 00:10:09,600
not all of them but uh we don't get a

224
00:10:15,590 --> 00:10:12,720
lot of chances to watch uh much on uh

225
00:10:17,269 --> 00:10:15,600
dvd anyway and uh email is just very

226
00:10:22,069 --> 00:10:17,279
quick so uh

227
00:10:27,350 --> 00:10:24,310
hi my name is destino from weins middle

228
00:10:28,310 --> 00:10:27,360
school in galveston and my question is

229
00:10:33,990 --> 00:10:28,320
how

230
00:10:37,910 --> 00:10:36,069
well destiny it's uh it's very fun to

231
00:10:39,910 --> 00:10:37,920
sleep up here at night because obviously

232
00:10:41,269 --> 00:10:39,920
floating it's very very comfortable but

233
00:10:42,550 --> 00:10:41,279
you got to be careful because if we just

234
00:10:43,910 --> 00:10:42,560
fell asleep we might float and do

235
00:10:45,910 --> 00:10:43,920
another module wake up and not know

236
00:10:47,670 --> 00:10:45,920
where we are so we have uh sleep

237
00:10:49,910 --> 00:10:47,680
restraints they're kind of like a

238
00:10:51,670 --> 00:10:49,920

sleeping bag and we tie across uh from

239
00:10:53,910 --> 00:10:51,680
one wall the other and you can put your

240
00:10:55,750 --> 00:10:53,920
sleeping constraint across a wall or

241
00:10:57,910 --> 00:10:55,760
across the ceiling or across the floor

242
00:10:59,110 --> 00:10:57,920
wherever you want to so it's a it's very

243
00:11:00,470 --> 00:10:59,120
very comfortable they're like sleeping

244
00:11:01,910 --> 00:11:00,480
bags except they they

245
00:11:03,750 --> 00:11:01,920
zip up so they come around your shoulder

246
00:11:09,269 --> 00:11:03,760
so you don't float out

247
00:11:17,030 --> 00:11:14,790
my name is my name is my name

248
00:11:23,590 --> 00:11:17,040
burbank middle school and our question

249
00:11:29,190 --> 00:11:25,990
well thanks to alan eduardo and roberto

250
00:11:32,310 --> 00:11:29,200
for that great question um

251
00:11:34,630 --> 00:11:32,320
you know we were picked uh by the chief

252
00:11:36,870 --> 00:11:34,640
of the astronaut office dr peggy whitson

253
00:11:39,190 --> 00:11:36,880
and she's our boss and

254
00:11:39,990 --> 00:11:39,200
obviously her her choices have to go

255
00:11:40,949 --> 00:11:40,000
through

256
00:11:43,750 --> 00:11:40,959
several

257
00:11:46,069 --> 00:11:43,760
bosses up above her at nasa but

258
00:11:47,750 --> 00:11:46,079
primarily it's our our boss the chief of

259
00:12:03,350 --> 00:11:47,760
the astronaut office who picks uh

260
00:12:07,110 --> 00:12:05,269
boy it's amazing it's like the best

261
00:12:08,550 --> 00:12:07,120
roller coaster ride you've ever been on

262
00:12:11,190 --> 00:12:08,560
it's kind of like getting shot out of a

263
00:12:13,269 --> 00:12:11,200

cannon you go from zero to seventeen

264
00:12:15,670 --> 00:12:13,279
thousand five hundred miles an hour in

265
00:12:17,509 --> 00:12:15,680
eight and a half minutes and it's a it's

266
00:12:18,949 --> 00:12:17,519
an amazing ride and the view keeps

267
00:12:21,030 --> 00:12:18,959
changing because it only takes about a

268
00:12:23,590 --> 00:12:21,040
minute or a minute and a half before the

269
00:12:25,030 --> 00:12:23,600
blue sky turns to jet black as you start

270
00:12:26,790 --> 00:12:25,040
getting into the upper regions of the

271
00:12:28,550 --> 00:12:26,800
atmosphere and then in eight and a half

272
00:12:30,550 --> 00:12:28,560
minutes the engines cut off and

273
00:12:32,389 --> 00:12:30,560
everything starts floating and it's it's

274
00:12:38,550 --> 00:12:32,399
a spectacular ride and we really enjoyed

275
00:12:47,590 --> 00:12:41,829
from sts 135

276
00:12:53,030 --> 00:12:50,069
well thanks that's a great question and

277
00:12:55,350 --> 00:12:53,040
it's a bit of a complicated answer

278
00:12:56,790 --> 00:12:55,360
um on the space station they typically

279
00:12:59,030 --> 00:12:56,800
use uh

280
00:13:01,350 --> 00:12:59,040
what we call greenwich mean time which

281
00:13:02,949 --> 00:13:01,360
means it's based on the time uh

282
00:13:04,870 --> 00:13:02,959
somewhere in england

283
00:13:07,430 --> 00:13:04,880
and we use that time while we're on

284
00:13:09,910 --> 00:13:07,440
space station but for shuttle missions

285
00:13:12,150 --> 00:13:09,920
we also use what we call mission elapsed

286
00:13:15,509 --> 00:13:12,160
time which means the clock starts at

287
00:13:19,030 --> 00:13:15,519
zero when we launch so right now

288
00:13:22,230 --> 00:13:19,040

we're at eight days 18 hours and 53

289
00:13:24,389 --> 00:13:22,240
minutes into the mission of sts-135

290
00:13:25,430 --> 00:13:24,399
and just to complicate things even

291
00:13:27,110 --> 00:13:25,440
further

292
00:13:27,990 --> 00:13:27,120
we go around the earth so fast that

293
00:13:29,910 --> 00:13:28,000
every

294
00:13:33,350 --> 00:13:29,920
90 minutes we have an orbit so we get

295
00:13:34,949 --> 00:13:33,360
sunrises and sunsets 16 times a day so

296
00:13:36,949 --> 00:13:34,959
it kind of gets a little confusing but

297
00:13:45,189 --> 00:13:36,959
that's how we try to manage to maintain

298
00:13:51,910 --> 00:13:49,750
hi my name is from wise ecu my question

299
00:13:56,949 --> 00:13:51,920
is how why do you know

300
00:14:00,069 --> 00:13:58,710
well kiana it actually just looks like

301
00:14:01,829 --> 00:14:00,079
there's no gravity there is still

302
00:14:04,230 --> 00:14:01,839
gravity up here and if we weren't

303
00:14:06,470 --> 00:14:04,240
traveling at orbital speeds which is 17

304
00:14:08,069 --> 00:14:06,480
500 miles an hour if we were just took

305
00:14:10,150 --> 00:14:08,079
an elevator straight up here to this

306
00:14:11,910 --> 00:14:10,160
altitude and got out we would fall back

307
00:14:14,389 --> 00:14:11,920
down to earth it's the fact that we're

308
00:14:16,470 --> 00:14:14,399
going 17 000 miles an hour that we that

309
00:14:18,550 --> 00:14:16,480
we have an orbital orbital curve and we

310
00:14:20,150 --> 00:14:18,560
curve around the uh around the surface

311
00:14:21,750 --> 00:14:20,160
of the earth so we're actually falling

312
00:14:24,629 --> 00:14:21,760
at the same rate that the earth curves

313
00:14:26,470 --> 00:14:24,639

away so it feels for all intents and

314
00:14:31,990 --> 00:14:26,480
purposes like there's no gravity up here

315
00:14:35,750 --> 00:14:33,829
hi my name is jerome

316
00:14:38,389 --> 00:14:35,760
carroll and i go to weisman square in

317
00:14:39,910 --> 00:14:38,399
galveston in galveston texas and my

318
00:14:46,949 --> 00:14:39,920
question is

319
00:14:50,949 --> 00:14:48,870
well thanks uh that's a great question

320
00:14:54,230 --> 00:14:50,959
as well um for our mission we're going

321
00:14:55,269 --> 00:14:54,240
to be up here roughly 13 days

322
00:14:57,829 --> 00:14:55,279
but

323
00:15:01,350 --> 00:14:57,839
it really depends on the mission my last

324
00:15:03,590 --> 00:15:01,360
mission we were here 16 days and then

325
00:15:05,189 --> 00:15:03,600
i'm sure rex's were very similar but

326
00:15:07,269 --> 00:15:05,199
then the crew members that stay up here

327
00:15:10,389 --> 00:15:07,279
on space station can stay as long as six

328
00:15:12,949 --> 00:15:10,399
or seven months so

329
00:15:14,550 --> 00:15:12,959
we're we're able to stay in space for a

330
00:15:16,790 --> 00:15:14,560
fairly long time but for the shuttle

331
00:15:22,069 --> 00:15:16,800
missions we typically stay you know a

332
00:15:29,030 --> 00:15:26,069
i'm jonathan and i'm at a sema program

333
00:15:30,949 --> 00:15:29,040
and i'm from las cruces and

334
00:15:36,550 --> 00:15:30,959
my question is

335
00:15:39,670 --> 00:15:38,230
well jonathan actually we can listen to

336
00:15:41,189 --> 00:15:39,680
music in space and as a matter of fact

337
00:15:43,189 --> 00:15:41,199
this morning for the first time i used

338
00:15:45,910 --> 00:15:43,199

my ipod because i listened to listen to

339
00:15:47,749 --> 00:15:45,920
some music uh it uh i just was having a

340
00:15:48,949 --> 00:15:47,759
little trouble sleeping in so i decided

341
00:15:50,710 --> 00:15:48,959
well i'll just listen to some music and

342
00:15:52,710 --> 00:15:50,720
it was wonderful i had a a bunch of

343
00:15:55,269 --> 00:15:52,720
songs that i had selected to bring with

344
00:15:57,110 --> 00:15:55,279
me and uh and put the uh put the

345
00:15:58,790 --> 00:15:57,120
headphones on or the earbuds in and got

346
00:16:06,230 --> 00:15:58,800
to listen to my favorite songs before i

347
00:16:10,470 --> 00:16:08,389
hello i'm sebastian biss and i am

348
00:16:12,550 --> 00:16:10,480
dorothy james we are with the nasa

349
00:16:14,550 --> 00:16:12,560
summer camp at vanderbilt dyer

350
00:16:15,829 --> 00:16:14,560
observatory in nashville tennessee our

351
00:16:17,910 --> 00:16:15,839
campers are fifth and sixth grade

352
00:16:23,990 --> 00:16:17,920
students and we have a question how many

353
00:16:28,150 --> 00:16:26,389
that's a good question uh sebastian and

354
00:16:30,310 --> 00:16:28,160
dorothy um

355
00:16:33,269 --> 00:16:30,320
no real large meteors have ever hit the

356
00:16:34,470 --> 00:16:33,279
iss as rex said before

357
00:16:37,430 --> 00:16:34,480
we have a

358
00:16:43,269 --> 00:16:40,310
radars and satellites that can track

359
00:16:44,470 --> 00:16:43,279
orbital uh debris and if if it's

360
00:16:47,110 --> 00:16:44,480
something that's large enough we can

361
00:16:48,389 --> 00:16:47,120
move the space station in order to miss

362
00:16:50,310 --> 00:16:48,399
that but

363
00:16:52,230 --> 00:16:50,320

the space station has been hit by what

364
00:16:54,710 --> 00:16:52,240
we call micro meteorites before and

365
00:16:57,030 --> 00:16:54,720
they're really tiny almost sand sized

366
00:16:59,350 --> 00:16:57,040
pieces of meteorites

367
00:17:01,910 --> 00:16:59,360
but typically they don't do any

368
00:17:03,670 --> 00:17:01,920
significant damage to the space station

369
00:17:19,590 --> 00:17:03,680
other than maybe putting a little mark

370
00:17:27,750 --> 00:17:22,789
atlantis iss this is houston acr thank

371
00:17:27,760 --> 00:17:30,710
thanks a lot

372
00:17:35,590 --> 00:17:33,669
thank you atlantis iss and nasa summer

373
00:17:37,590 --> 00:17:35,600
of innovation students