1
00:00:10,580 --> 00:00:04,519
okay station this is Houston are you

2
00:00:15,169 --> 00:00:10,590
ready for the event Houston station were

3
00:00:17,930 --> 00:00:15,179
ready for the event US Department of

4
00:00:24,830 --> 00:00:17,940
Education this is Houston please call

5
00:00:26,060 --> 00:00:24,840
station for a voice check station this

6
00:00:28,490 --> 00:00:26,070
is Arne Duncan and we have some

7
00:00:30,470 --> 00:00:28,500
fantastic students here from deal middle

8
00:00:32,659 --> 00:00:30,480
school and heart middle school worth the

9
00:00:38,119 --> 00:00:32,669
Department of Education in Washington DC

10
00:00:39,799 --> 00:00:38,129
do you hear me ok we have you loud and

11
00:00:47,389 --> 00:00:39,809
clear welcome aboard the International

12
00:00:48,979 --> 00:00:47,399
Space Station thanks so much and welcome

13
00:00:51,080 --> 00:00:48,989

to the crew of the International Space

14
00:00:52,729 --> 00:00:51,090
Station commander Wheelock flight

15
00:00:55,520 --> 00:00:52,739
engineer Walker and flight engineer

16
00:00:57,470 --> 00:00:55,530
Kelly our students are ready and eager

17
00:00:59,420 --> 00:00:57,480
to hear from you thank you so much for

18
00:01:01,099 --> 00:00:59,430
taking the time to do this and the first

19
00:01:03,260 --> 00:01:01,109
question will come from Sophia acclaim

20
00:01:10,880 --> 00:01:03,270
in a deal middle school and Sophia

21
00:01:13,340 --> 00:01:10,890
you're up my name is Sophia and my

22
00:01:15,140 --> 00:01:13,350
question is for Doug Wheelock what kind

23
00:01:16,789 --> 00:01:15,150
of research are you working on and how

24
00:01:22,940 --> 00:01:16,799
will it help us understand our planet

25
00:01:24,499 --> 00:01:22,950
and the universe hi Sophia well that's a

26
00:01:27,320 --> 00:01:24,509
great question and that's the purpose

27
00:01:29,240 --> 00:01:27,330
the prime purpose while we're here on

28
00:01:31,550 --> 00:01:29,250
the space station is to operate these

29
00:01:33,319 --> 00:01:31,560
laboratories we haven't any one given

30
00:01:35,840 --> 00:01:33,329
time over a hundred and thirty

31
00:01:38,090 --> 00:01:35,850
experiments going on onboard we're

32
00:01:40,789 --> 00:01:38,100
studying studying the earth studying

33
00:01:43,730 --> 00:01:40,799
space studying our bodies and our bodies

34
00:01:45,950 --> 00:01:43,740
reaction to to being in space and long

35
00:01:48,530 --> 00:01:45,960
duration and trying to learn a little

36
00:01:51,289 --> 00:01:48,540
bit more about material development and

37
00:01:52,760 --> 00:01:51,299
development of medicine and

38
00:01:55,910 --> 00:01:52,770

pharmaceuticals and things like this and

39
00:01:57,740 --> 00:01:55,920
so so what we're trying to do is is

40
00:01:59,600 --> 00:01:57,750
operate these laboratories in the

41
00:02:01,130 --> 00:01:59,610
absence of gravity and when we take

42
00:02:03,319 --> 00:02:01,140
gravity out of the equation some

43
00:02:07,100 --> 00:02:03,329
sometimes some wonderful things happen

44
00:02:08,510 --> 00:02:07,110
things like crystals grow in in three

45
00:02:10,729 --> 00:02:08,520
dimension now rather than in two

46
00:02:12,640 --> 00:02:10,739
dimension like we we have on earth and

47
00:02:14,800 --> 00:02:12,650
we can

48
00:02:17,550 --> 00:02:14,810
through this process I developed new

49
00:02:20,289 --> 00:02:17,560
processes of developing materials and

50
00:02:23,559 --> 00:02:20,299
developing pharmaceuticals to help us in

51
00:02:25,839 --> 00:02:23,569
the areas of Medicine and also an in the

52
00:02:28,360 --> 00:02:25,849
process of doing that we're staying long

53
00:02:30,960 --> 00:02:28,370
duration on board the space station sort

54
00:02:33,610 --> 00:02:30,970
of replicating a transit time to another

55
00:02:36,250 --> 00:02:33,620
another body in our solar system be it

56
00:02:38,589 --> 00:02:36,260
Mars or the moon or or an asteroid or

57
00:02:41,020 --> 00:02:38,599
something and so we're using ourselves

58
00:02:45,099 --> 00:02:41,030
as test subjects as well to determine

59
00:02:46,780 --> 00:02:45,109
how we can survive and thrive in an

60
00:02:54,789 --> 00:02:46,790
environment away from grab earth's

61
00:03:02,949 --> 00:02:54,799
gravity for a long period of time thank

62
00:03:05,319 --> 00:03:02,959
you my name is Gary and my question is

63
00:03:07,690 --> 00:03:05,329

for Shannon Walker how do you

64
00:03:13,720 --> 00:03:07,700
communicate with other crew members if

65
00:03:16,030 --> 00:03:13,730
people are from different countries here

66
00:03:17,430 --> 00:03:16,040
that's a good question one thing we have

67
00:03:19,869 --> 00:03:17,440
to do is learn different languages

68
00:03:22,030 --> 00:03:19,879
another thing is we generally speak

69
00:03:23,920 --> 00:03:22,040
English aboard the space station but I

70
00:03:25,750 --> 00:03:23,930
can assure you when I was studying in

71
00:03:27,129 --> 00:03:25,760
Russia to be the co-pilot of the Soyuz I

72
00:03:28,750 --> 00:03:27,139
had to learn the Russian language so I

73
00:03:32,020 --> 00:03:28,760
could communicate with the Russian

74
00:03:41,320 --> 00:03:32,030
control center in Russian so basically

75
00:03:46,520 --> 00:03:44,240
my name is Alex and my question is for

76
00:03:48,920 --> 00:03:46,530
Scott Kelly do you have any free time

77
00:03:56,510 --> 00:03:48,930
and if so what do you do to entertain

78
00:03:58,070 --> 00:03:56,520
yourself well hi Alex we do have a

79
00:04:00,200 --> 00:03:58,080
little bit of free time you know we're

80
00:04:03,320 --> 00:04:00,210
normally very busy up here and most of

81
00:04:04,850 --> 00:04:03,330
our our working day and even some time

82
00:04:06,440 --> 00:04:04,860
in the evenings and on the weekends is

83
00:04:10,250 --> 00:04:06,450
spent working because there's so much to

84
00:04:11,690 --> 00:04:10,260
do but on that on those occasions where

85
00:04:13,010 --> 00:04:11,700
we do have some free time there are

86
00:04:15,650 --> 00:04:13,020
certain things we do to entertain

87
00:04:17,660 --> 00:04:15,660
ourselves one and I think most space

88
00:04:20,270 --> 00:04:17,670

stations crewmember members would agree

89
00:04:23,120 --> 00:04:20,280
the the best one is actually to look out

90
00:04:25,420 --> 00:04:23,130
at Planet Earth because it is so truly

91
00:04:28,760 --> 00:04:25,430
beautiful from this vantage point and

92
00:04:31,130 --> 00:04:28,770
because we fly around it every 90

93
00:04:34,520 --> 00:04:31,140
minutes we get to you know experience

94
00:04:37,100 --> 00:04:34,530
seeing places on earth from a distance

95
00:04:38,450 --> 00:04:37,110
that we might not get to experience you

96
00:04:39,980 --> 00:04:38,460
know if we travel there some day and

97
00:04:42,500 --> 00:04:39,990
it's a it's a really interesting

98
00:04:44,750 --> 00:04:42,510
perspective to look at earth above the

99
00:04:47,540 --> 00:04:44,760
atmosphere it's a very very beautiful

100
00:04:51,860 --> 00:04:47,550
planet and you know we're all fortunate

101
00:04:53,720 --> 00:04:51,870
to have it also we have to exercise a

102
00:04:56,290 --> 00:04:53,730
lot on board and most crew members

103
00:04:58,970 --> 00:04:56,300
really enjoy doing that because normally

104
00:05:00,830 --> 00:04:58,980
flying around in microgravity you don't

105
00:05:04,280 --> 00:05:00,840
get a whole lot exercise like you might

106
00:05:06,440 --> 00:05:04,290
you know just walking around on earth so

107
00:05:08,440 --> 00:05:06,450
exercise becomes very important to us we

108
00:05:13,370 --> 00:05:08,450
we have a bunch of movies we can watch

109
00:05:15,520 --> 00:05:13,380
we listen to music read so a lot of the

110
00:05:17,450 --> 00:05:15,530
things that you would do on earth for

111
00:05:28,750 --> 00:05:17,460
entertainment we also do here on the

112
00:05:33,620 --> 00:05:31,430
my name is Deon say and my question is

113
00:05:35,300 --> 00:05:33,630

for Doug Wheelock what is the

114
00:05:41,900 --> 00:05:35,310
International Space Station missile

115
00:05:44,450 --> 00:05:41,910
accomplish I Deonte well that's a very

116
00:05:46,100 --> 00:05:44,460
good question and that's our primary

117
00:05:48,080 --> 00:05:46,110
purpose here is to operate this

118
00:05:51,140 --> 00:05:48,090
laboratory where world-class laboratory

119
00:05:54,560 --> 00:05:51,150
and we offer in a unique environment up

120
00:05:56,990 --> 00:05:54,570
here inside of the station we can we can

121
00:05:58,700 --> 00:05:57,000
offer an environment where we remove

122
00:06:01,460 --> 00:05:58,710
gravity from the equation and all these

123
00:06:04,870 --> 00:06:01,470
scientific studies and in the areas of

124
00:06:07,010 --> 00:06:04,880
research of pharmaceuticals medical

125
00:06:09,590 --> 00:06:07,020
biological experiments and things like

126
00:06:11,990 --> 00:06:09,600
this and also we have outside of the

127
00:06:13,730 --> 00:06:12,000
space station means to conduct

128
00:06:16,910 --> 00:06:13,740
experiments out in the vacuum of space

129
00:06:20,450 --> 00:06:16,920
as well so so we're gathering all the

130
00:06:23,870 --> 00:06:20,460
science for for our scientists on on the

131
00:06:26,350 --> 00:06:23,880
earth and and and plan to return great

132
00:06:28,880 --> 00:06:26,360
scientific discoveries in the area of

133
00:06:32,180 --> 00:06:28,890
increased are in more efficient

134
00:06:34,550 --> 00:06:32,190
processes better materials there better

135
00:06:46,010 --> 00:06:34,560
pharmaceuticals that help our life on

136
00:06:52,770 --> 00:06:49,890
my name is Gus mark kent and my question

137
00:06:55,560 --> 00:06:52,780
for shannon walker and my question is

138
00:07:03,450 --> 00:06:55,570

for shannon walker how is food on earth

139
00:07:05,280 --> 00:07:03,460
different from food in space Doug just

140
00:07:07,410 --> 00:07:05,290
said it was tastier in some sense that's

141
00:07:09,180 --> 00:07:07,420
true the main difference between food on

142
00:07:11,220 --> 00:07:09,190
earth and food and spaces so much of

143
00:07:14,700 --> 00:07:11,230
what we have up here is dehydrated it

144
00:07:15,780 --> 00:07:14,710
takes a lot of fuel to get water up into

145
00:07:18,240 --> 00:07:15,790
space because water is actually

146
00:07:21,630 --> 00:07:18,250
relatively heavy so we remove the water

147
00:07:23,820 --> 00:07:21,640
on the ground and launch the food which

148
00:07:25,290 --> 00:07:23,830
is dehydrated into space so that is one

149
00:07:27,810 --> 00:07:25,300
of the biggest differences that we have

150
00:07:29,670 --> 00:07:27,820
and so you ask well what do you do we've

151
00:07:31,050 --> 00:07:29,680
got water up here where does that come

152
00:07:32,700 --> 00:07:31,060
from if we're not launching it we

153
00:07:35,280 --> 00:07:32,710
actually make water when the shuttle is

154
00:07:36,930 --> 00:07:35,290
on attached to the station we can get

155
00:07:40,440 --> 00:07:36,940
water from the shuttle because they make

156
00:07:42,870 --> 00:07:40,450
that as a product for making electricity

157
00:07:44,910 --> 00:07:42,880
on the shuttle so we get water from the

158
00:07:54,310 --> 00:07:44,920
shuttle and then we also make water here

159
00:08:00,320 --> 00:07:57,800
my name is Nicholas and my my question

160
00:08:10,780 --> 00:08:00,330
is for Scott Kelly have you ever had a

161
00:08:17,430 --> 00:08:13,090
I think your question was have we ever

162
00:08:20,380 --> 00:08:17,440
had any problems here in space like

163
00:08:23,440 --> 00:08:20,390

potentially maybe you know a problem

164
00:08:26,440 --> 00:08:23,450
with a system or with you know one of

165
00:08:29,380 --> 00:08:26,450
the crew members medically we do

166
00:08:31,870 --> 00:08:29,390
occasionally have you no problems with

167
00:08:34,690 --> 00:08:31,880
the systems just about an hour ago we

168
00:08:36,730 --> 00:08:34,700
had a warning go off in the Russian

169
00:08:39,490 --> 00:08:36,740
segment of the system that of the space

170
00:08:45,280 --> 00:08:39,500
station that said there was a low level

171
00:08:48,370 --> 00:08:45,290
of oxygen in the in the Russian what's

172
00:08:49,990 --> 00:08:48,380
called the FGB or functional cargo block

173
00:08:52,420 --> 00:08:50,000
it's one of the Russian modules and it

174
00:08:55,210 --> 00:08:52,430
said the oxygen was very very low like

175
00:08:58,690 --> 00:08:55,220
you know maybe ten percent of what it

176
00:09:00,820 --> 00:08:58,700
should normally be and fortunately that

177
00:09:06,460 --> 00:09:00,830
wasn't a real emergency it was just a

178
00:09:08,650 --> 00:09:06,470
sensor but we do have more serious

179
00:09:11,380 --> 00:09:08,660
things happen at times when before I got

180
00:09:13,480 --> 00:09:11,390
here we had the failure of a pump that's

181
00:09:18,730 --> 00:09:13,490
very important to cooling the outside of

182
00:09:20,320 --> 00:09:18,740
the space station and so you know we do

183
00:09:23,050 --> 00:09:20,330
occasionally have things go wrong but we

184
00:09:34,320 --> 00:09:23,060
have ways to respond to those and then

185
00:09:41,080 --> 00:09:37,810
my name is Will and my question is for

186
00:09:49,810 --> 00:09:41,090
Doug Wheelock what is the most beautiful

187
00:09:53,350 --> 00:09:49,820
thing you have ever seen from space well

188
00:09:54,760 --> 00:09:53,360

that's a great question than enough the

189
00:09:59,410 --> 00:09:54,770
most beautiful thing is my crewmates

190
00:10:01,180 --> 00:09:59,420
Shannon well actually I think probably

191
00:10:03,070 --> 00:10:01,190
everyone would agree the most beautiful

192
00:10:05,860 --> 00:10:03,080
thing that we can see from the space

193
00:10:07,720 --> 00:10:05,870
station is our planet and and of course

194
00:10:09,790 --> 00:10:07,730
there are so many different things to

195
00:10:11,650 --> 00:10:09,800
see about our plan of both in daytime

196
00:10:14,080 --> 00:10:11,660
and nighttime you know when I first came

197
00:10:16,300 --> 00:10:14,090
up here I thought and I first got a

198
00:10:19,540 --> 00:10:16,310
chance to look at the earth the earth is

199
00:10:23,500 --> 00:10:19,550
like an explosion of color in this in

200
00:10:28,510 --> 00:10:23,510
this big sea of darkness that space that

201
00:10:30,220 --> 00:10:28,520
we know and and what you know I thought

202
00:10:31,810 --> 00:10:30,230
about what it would be like to go into

203
00:10:33,280 --> 00:10:31,820
eclipse and come on the back side of the

204
00:10:35,170 --> 00:10:33,290
earth when the earth was in darkness

205
00:10:37,600 --> 00:10:35,180
that I thought we'll probably it would

206
00:10:40,390 --> 00:10:37,610
just blend in with the darkness of deep

207
00:10:44,320 --> 00:10:40,400
space but but no the the earth at night

208
00:10:46,900 --> 00:10:44,330
as well is is just a live with with life

209
00:10:51,370 --> 00:10:46,910
and with motion and we get to see

210
00:10:53,620 --> 00:10:51,380
lightning and Aurora and city lights and

211
00:10:56,260 --> 00:10:53,630
it's just absolutely beautiful so I'll

212
00:11:00,700 --> 00:10:56,270
have to say that of my most beautiful

213
00:11:03,040 --> 00:11:00,710

sight so far of the earth has been back

214
00:11:05,710 --> 00:11:03,050
a couple of months ago I believe was in

215
00:11:08,290 --> 00:11:05,720
July or August we were able to see the

216
00:11:10,330 --> 00:11:08,300
Southern Lights the Aurora over the over

217
00:11:13,540 --> 00:11:10,340
the South Pole and we actually had a

218
00:11:15,430 --> 00:11:13,550
night where the moon was full and the

219
00:11:17,890 --> 00:11:15,440
Sun was coming up and we had this

220
00:11:20,230 --> 00:11:17,900
beautiful aurora and the moon was

221
00:11:22,930 --> 00:11:20,240
shining was shining off the Aurora as

222
00:11:24,580 --> 00:11:22,940
was the Sun the Rising Sun and so is

223
00:11:27,010 --> 00:11:24,590
pretty it was pretty dramatic and very

224
00:11:29,560 --> 00:11:27,020
just a beautiful beautiful picture out

225
00:11:39,540 --> 00:11:29,570
the window and we all were glued glued

226
00:11:44,610 --> 00:11:42,000
my name is shaquanna and my question is

227
00:11:46,800 --> 00:11:44,620
for shannon walker do you feel like your

228
00:11:52,680 --> 00:11:46,810
personality or the way you think change

229
00:11:54,570 --> 00:11:52,690
is why you are in space shaquanna that

230
00:11:55,829 --> 00:11:54,580
is a very interesting question and to be

231
00:11:58,170 --> 00:11:55,839
honest I've never really thought about

232
00:12:00,930 --> 00:11:58,180
it I think I'd have to ask my crewmates

233
00:12:02,430 --> 00:12:00,940
to see if they think that I have changed

234
00:12:04,500 --> 00:12:02,440
while I've been in space i don't think

235
00:12:06,720 --> 00:12:04,510
i've i've changed my personality have

236
00:12:08,850 --> 00:12:06,730
changed or how i think through things

237
00:12:10,110 --> 00:12:08,860
has changed but i think my crewmates

238
00:12:21,540 --> 00:12:10,120

would probably be the final judge of

239
00:12:27,639 --> 00:12:24,190
my name is a mocha Hudson and my

240
00:12:35,740 --> 00:12:27,649
question is for Scott Kelly do you feel

241
00:12:38,500 --> 00:12:35,750
like your job is dangerous well you know

242
00:12:40,300 --> 00:12:38,510
flying in spaces is somewhat dangerous

243
00:12:43,660 --> 00:12:40,310
you know we're flying around the earth

244
00:12:48,630 --> 00:12:43,670
at 17,500 miles an hour in a you know

245
00:12:51,819 --> 00:12:48,640
almost near vacuum and to get here

246
00:12:55,600 --> 00:12:51,829
requires a incredible amount of energy

247
00:12:57,639 --> 00:12:55,610
to get going that fast and you know to

248
00:12:59,259 --> 00:12:57,649
get home we have to remove that energy

249
00:13:03,400 --> 00:12:59,269
out of the vehicle whether it's a Soyuz

250
00:13:07,630 --> 00:13:03,410
or a space shuttle so you know it is

251
00:13:11,350 --> 00:13:07,640
risky and somewhat dangerous but you

252
00:13:15,340 --> 00:13:11,360
know the different government agencies

253
00:13:16,990 --> 00:13:15,350
whether it's NASA or the other partners

254
00:13:19,210 --> 00:13:17,000
on International Space Station work

255
00:13:23,560 --> 00:13:19,220
really really hard to make it as safe as

256
00:13:26,590 --> 00:13:23,570
as we possibly can so you know it has

257
00:13:33,939 --> 00:13:26,600
risk but normally doing great things

258
00:13:37,300 --> 00:13:33,949
have always involved risk so you know

259
00:13:48,000 --> 00:13:37,310
even though it's dangerous I'm happy and

260
00:13:53,680 --> 00:13:51,010
my name is ayana and my question is for

261
00:13:55,510 --> 00:13:53,690
the gweelok how does your body feel in

262
00:14:02,560 --> 00:13:55,520
space and is it very different from on

263
00:14:04,840 --> 00:14:02,570

earth hi Ayanna yes it is very different

264
00:14:06,700 --> 00:14:04,850
than on earth and them it actually feels

265
00:14:09,400 --> 00:14:06,710
a little strange when you first get here

266
00:14:13,000 --> 00:14:09,410
to space your your body of course

267
00:14:15,070 --> 00:14:13,010
everything is floating and so in the in

268
00:14:18,670 --> 00:14:15,080
the fluid in your inner ear sort of

269
00:14:21,130 --> 00:14:18,680
pools and stops the rotation and so it's

270
00:14:23,980 --> 00:14:21,140
so your sense of balance and up and down

271
00:14:25,690 --> 00:14:23,990
is a little bit confused and so the

272
00:14:27,700 --> 00:14:25,700
first couple of days up here in space

273
00:14:29,860 --> 00:14:27,710
it's a little confusing it can be a

274
00:14:31,690 --> 00:14:29,870
little disorienting especially when

275
00:14:34,030 --> 00:14:31,700
you're coming into a module you see

276
00:14:35,710 --> 00:14:34,040
around us here we've got experiments on

277
00:14:38,500 --> 00:14:35,720
the ceiling on the floor and the walls

278
00:14:40,750 --> 00:14:38,510
it doesn't matter where because because

279
00:14:43,360 --> 00:14:40,760
we have no gravity so we can use all the

280
00:14:46,600 --> 00:14:43,370
available surface space here and when

281
00:14:49,720 --> 00:14:46,610
you come into a module say upside down

282
00:14:52,269 --> 00:14:49,730
or something like that of B it would be

283
00:14:55,540 --> 00:14:52,279
a little bit miss orienting at first and

284
00:14:58,030 --> 00:14:55,550
so but your body adapts and you you know

285
00:15:01,780 --> 00:14:58,040
very very simple things are hard at

286
00:15:04,690 --> 00:15:01,790
first brushing your teeth drinking water

287
00:15:08,199 --> 00:15:04,700
our flu some sort of drink out of a bag

288
00:15:09,579 --> 00:15:08,209

eating food sleeping you know all these

289
00:15:11,860 --> 00:15:09,589
are very very simple things that we

290
00:15:13,570 --> 00:15:11,870
don't think about on earth but you have

291
00:15:15,670 --> 00:15:13,580
to rethink those things and relearn how

292
00:15:18,250 --> 00:15:15,680
to do those things once you come to

293
00:15:20,470 --> 00:15:18,260
space and and now after being here for

294
00:15:23,350 --> 00:15:20,480
so many days in so many weeks and months

295
00:15:25,420 --> 00:15:23,360
it's a it's hard to think back and

296
00:15:28,540 --> 00:15:25,430
remember life with gravity but we're

297
00:15:30,640 --> 00:15:28,550
going to get a we're going to see that

298
00:15:33,250 --> 00:15:30,650
big time at the end of this week when we

299
00:15:36,610 --> 00:15:33,260
return to the Planet Jenna and I would

300
00:15:38,260 --> 00:15:36,620
along with our crew may fielder but it

301
00:15:40,900 --> 00:15:38,270
is a little bit different on the body

302
00:15:42,910 --> 00:15:40,910
the body feels quite quite different

303
00:15:44,860 --> 00:15:42,920
when you get here to space and and will

304
00:15:46,210 --> 00:15:44,870
make the same as very similar adjustment

305
00:15:54,389 --> 00:15:46,220
when we get back to gravity it's great

306
00:15:59,170 --> 00:15:56,829
my name is Matthew and my question is

307
00:16:05,110 --> 00:15:59,180
for shannon walker how long did you

308
00:16:06,639 --> 00:16:05,120
train for going into space matthew great

309
00:16:08,949 --> 00:16:06,649
question we actually trained a really

310
00:16:10,750 --> 00:16:08,959
long time before going into space when i

311
00:16:13,720 --> 00:16:10,760
first became an astronaut I trained for

312
00:16:15,610 --> 00:16:13,730
two years learning how to are learning

313
00:16:17,620 --> 00:16:15,620

about the shuttle and the space station

314
00:16:19,360 --> 00:16:17,630
learning all the systems and then when I

315
00:16:21,400 --> 00:16:19,370
was assigned to this particular mission

316
00:16:33,610 --> 00:16:21,410
I trained for three years before i was

317
00:16:35,590 --> 00:16:33,620
finally launched into space thank you my

318
00:16:38,439 --> 00:16:35,600
name is Alyssa and my question is for

319
00:16:46,810 --> 00:16:38,449
Scott Kelly what inspired you to become

320
00:16:48,910 --> 00:16:46,820
an astronaut well Alyssa I when I was a

321
00:16:51,430 --> 00:16:48,920
kid it was definitely something I was

322
00:16:53,410 --> 00:16:51,440
interested in you know like a lot of

323
00:16:55,840 --> 00:16:53,420
kids are interested in doing things like

324
00:17:01,389 --> 00:16:55,850
you know flying in space or you know

325
00:17:03,460 --> 00:17:01,399
other challenging you know endeavors but

326
00:17:05,409 --> 00:17:03,470
it wasn't really until later when I was

327
00:17:07,270 --> 00:17:05,419
a pilot in the United States Navy and I

328
00:17:08,409 --> 00:17:07,280
become a tech became a test pilot that I

329
00:17:12,699 --> 00:17:08,419
actually thought it was something that

330
00:17:16,449 --> 00:17:12,709
was was achievable for me and you know

331
00:17:18,520 --> 00:17:16,459
as a pilot in the military for me it

332
00:17:21,490 --> 00:17:18,530
just seemed like the next most

333
00:17:34,590 --> 00:17:21,500
challenging type of flying and that's

334
00:17:39,370 --> 00:17:37,330
my name is Elizabeth and my question is

335
00:17:41,560 --> 00:17:39,380
for Doug Wheelock do you have a

336
00:17:48,490 --> 00:17:41,570
telescope on board and if so what can

337
00:17:50,830 --> 00:17:48,500
you see through it thank you hi

338
00:17:53,290 --> 00:17:50,840

Elizabeth good question we do not have a

339
00:17:55,900 --> 00:17:53,300
telescope on board but we have very very

340
00:17:58,330 --> 00:17:55,910
powerful camera lenses and some

341
00:18:01,690 --> 00:17:58,340
binoculars and things that we use very

342
00:18:06,940 --> 00:18:01,700
great we have a wide range of camera

343
00:18:09,190 --> 00:18:06,950
lenses on board and then at the towards

344
00:18:11,470 --> 00:18:09,200
the end of actually the beginning of

345
00:18:13,990 --> 00:18:11,480
next year there'll be a space shuttle

346
00:18:16,480 --> 00:18:14,000
launching with a with it with a very

347
00:18:18,760 --> 00:18:16,490
powerful telescope on it that will go on

348
00:18:22,120 --> 00:18:18,770
the outside of the space station they'll

349
00:18:25,540 --> 00:18:22,130
be used for scientists on the earth to

350
00:18:27,160 --> 00:18:25,550
study our to study our universe and but

351
00:18:29,590 --> 00:18:27,170
on board we just have very very powerful

352
00:18:42,080 --> 00:18:29,600
cameras that we can see a very fine

353
00:18:46,519 --> 00:18:43,940
I want to thank you guys so much for

354
00:18:48,620 --> 00:18:46,529
taking the time to spend of our students

355
00:18:49,940 --> 00:18:48,630
again this is fascinating and I look

356
00:18:51,710 --> 00:18:49,950
forward to this so much each year and I

357
00:18:53,269 --> 00:18:51,720
have a buddy of you are sitting next to

358
00:18:54,620 --> 00:18:53,279
me Leland Melvin I wanted him to just

359
00:19:00,140 --> 00:18:54,630
say hello to you and then we'll close

360
00:19:03,409 --> 00:19:00,150
out that you guys get back to work hey

361
00:19:04,789 --> 00:19:03,419
wheels miss O'Malley and Scott it's

362
00:19:06,049 --> 00:19:04,799
really great to see you guys up there

363
00:19:07,669 --> 00:19:06,059

and I'm really proud of what you're

364
00:19:10,279 --> 00:19:07,679
doing and helping inspire that next

365
00:19:11,419 --> 00:19:10,289
generation so I look forward to seeing

366
00:19:13,310 --> 00:19:11,429
you back on the ground i'll have that

367
00:19:18,700 --> 00:19:13,320
cheeseburger ready for you when you when

368
00:19:23,269 --> 00:19:21,649
okay thank thanks Leela and to all the

369
00:19:25,610 --> 00:19:23,279
students that are there and in the

370
00:19:28,190 --> 00:19:25,620
administrative staff and the faculty and

371
00:19:30,440 --> 00:19:28,200
teachers that are there thank you really

372
00:19:31,970 --> 00:19:30,450
really great questions was a real

373
00:19:35,269 --> 00:19:31,980
pleasure having you onboard the space

374
00:19:36,320 --> 00:19:35,279
station with us today and and actually

375
00:19:38,960 --> 00:19:36,330
we wanted to do a little bit of

376
00:19:40,730 --> 00:19:38,970
demonstration here this is a EMU

377
00:19:43,820 --> 00:19:40,740
spacesuit a spacesuit that we use for

378
00:19:46,850 --> 00:19:43,830
our spacewalks and this suit on the

379
00:19:50,659 --> 00:19:46,860
planet Earth weighs about 300 to 350

380
00:19:53,029 --> 00:19:50,669
pounds and so you can see how how how

381
00:19:56,600 --> 00:19:53,039
easy it is to move around here in space

382
00:19:58,460 --> 00:19:56,610
and so our little demonstration with

383
00:20:00,019 --> 00:19:58,470
weightlessness in space but with the one

384
00:20:03,019 --> 00:20:00,029
thing that we have to remember very very

385
00:20:05,240 --> 00:20:03,029
important in the ways of science that

386
00:20:06,980 --> 00:20:05,250
they although things are weightless they

387
00:20:09,080 --> 00:20:06,990
still have mass and we have to be very

388
00:20:10,940 --> 00:20:09,090

careful as we move large objects like

389
00:20:13,820 --> 00:20:10,950
this around both inside the space

390
00:20:16,340 --> 00:20:13,830
station and outside so whenever you

391
00:20:18,289 --> 00:20:16,350
propel an object with a certain force

392
00:20:20,240 --> 00:20:18,299
it's going to take an equal and opposite

393
00:20:22,190 --> 00:20:20,250
force to stop that object as well so

394
00:20:23,840 --> 00:20:22,200
sometimes it's a hard lesson to learn as

395
00:20:26,149 --> 00:20:23,850
well but thank you for joining us and

396
00:20:40,100 --> 00:20:26,159
have a great day and and we'll look

397
00:20:46,169 --> 00:20:42,480
station this is Houston ACR that

398
00:20:47,940 --> 00:20:46,179
concludes the event thank you thank you

399
00:20:50,730 --> 00:20:47,950
the Secretary of Education Arne Duncan

400
00:20:53,580 --> 00:20:50,740
and two participants at the Department

401
00:20:56,640 --> 00:20:53,590
of Education wash everybody's station

402
00:20:59,370 --> 00:20:56,650
please stand by while we reconfigure