



SIG 1 SIG 2

1
00:00:06,869 --> 00:00:02,310
station this is houston are you ready

2
00:00:11,350 --> 00:00:08,549
houston this is the international space

3
00:00:13,910 --> 00:00:11,360
station i am ready for the event

4
00:00:15,990 --> 00:00:13,920
canada aviation and space museum this is

5
00:00:20,310 --> 00:00:16,000
mission control houston please call

6
00:00:24,790 --> 00:00:22,310
station this is annabel klutie at the

7
00:00:29,990 --> 00:00:24,800
canada aviation and space museum how do

8
00:00:34,630 --> 00:00:32,389
i read you loud and clear from here on

9
00:00:37,110 --> 00:00:34,640
the international space station everyone

10
00:00:42,069 --> 00:00:37,120
at the aviation and space museum go

11
00:00:44,470 --> 00:00:43,190
hi chris

12
00:00:46,630 --> 00:00:44,480
we're so proud of you and we're

13
00:00:49,110 --> 00:00:46,640

following your adventures there i hope

14

00:00:51,270 --> 00:00:49,120

eddie is on his best behavior and his

15

00:00:56,630 --> 00:00:51,280

snoring isn't keeping you awake too much

16

00:01:01,590 --> 00:00:59,349

uh eddie lions make a lot of noise when

17

00:01:04,869 --> 00:01:01,600

they snore but uh we've been keeping

18

00:01:07,109 --> 00:01:04,879

eddie inside a container inside a

19

00:01:09,670 --> 00:01:07,119

cupboard so his uh his snores have been

20

00:01:11,270 --> 00:01:09,680

muffled but he rode up to space with me

21

00:01:13,270 --> 00:01:11,280

and he's been flying in space the whole

22

00:01:16,390 --> 00:01:13,280

time with me your excellency thank you

23

00:01:19,429 --> 00:01:18,070

chris be careful he doesn't sneak out of

24

00:01:21,030 --> 00:01:19,439

that cupboard he's uh quite an

25

00:01:22,310 --> 00:01:21,040

adventurer as you know

26

00:01:23,830 --> 00:01:22,320

we've got a whole bunch of great

27

00:01:25,510 --> 00:01:23,840

students here for some questions let's

28

00:01:29,270 --> 00:01:25,520

get on with them yes

29

00:01:32,789 --> 00:01:29,280

we have a first question here for you

30

00:01:35,510 --> 00:01:32,799

hello my name is emily zoo and i'm in

31

00:01:42,789 --> 00:01:35,520

grade six i heard that your sense of

32

00:01:47,109 --> 00:01:44,950

emily your sense of taste it's sort of

33

00:01:49,990 --> 00:01:47,119

like when you have a cold

34

00:01:51,749 --> 00:01:50,000

and when you have a cold all of this the

35

00:01:54,310 --> 00:01:51,759

stuff that normally drains out of your

36

00:01:56,310 --> 00:01:54,320

nose gets plugged up there and part of

37

00:01:58,469 --> 00:01:56,320

your taste is from your tongue and your

38

00:01:59,429 --> 00:01:58,479

smell and your senses and when you can't

39

00:02:01,830 --> 00:01:59,439

smell

40

00:02:03,749 --> 00:02:01,840

your food is hard to taste it's the same

41

00:02:06,630 --> 00:02:03,759

for astronauts because when we get to

42

00:02:08,710 --> 00:02:06,640

space there's no gravity to pull all the

43

00:02:11,670 --> 00:02:08,720

stuff out of our head and so we get sort

44

00:02:13,350 --> 00:02:11,680

of a swollen head and it fills up our

45

00:02:15,510 --> 00:02:13,360

nose and makes our tongue kind of

46

00:02:17,990 --> 00:02:15,520

swollen and you can't taste your food

47

00:02:20,790 --> 00:02:18,000

but after a week or so your body gets

48

00:02:22,710 --> 00:02:20,800

used to it your nose opens up again and

49

00:02:24,150 --> 00:02:22,720

you can taste your food okay but for the

50

00:02:26,150 --> 00:02:24,160

first week

51
00:02:27,990 --> 00:02:26,160
it's like having a cold then nothing

52
00:02:32,790 --> 00:02:28,000
tastes very strong or nothing tastes

53
00:02:37,190 --> 00:02:34,710
another question

54
00:02:39,589 --> 00:02:37,200
hi my name is connell sloan

55
00:02:41,589 --> 00:02:39,599
from corpus christi school in grade six

56
00:02:43,750 --> 00:02:41,599
and i was wondering what would happen if

57
00:02:49,030 --> 00:02:43,760
you put a marshmallow outside the space

58
00:02:53,110 --> 00:02:51,190
well you can see right through that

59
00:02:55,190 --> 00:02:53,120
window there that's outside the space

60
00:02:56,790 --> 00:02:55,200
station there's just a couple layers of

61
00:02:58,710 --> 00:02:56,800
glass between us

62
00:03:01,750 --> 00:02:58,720
and what is out there which is the

63
00:03:04,470 --> 00:03:01,760

vacuum of space there's no air it's

64

00:03:07,830 --> 00:03:04,480
completely empty and in the sun

65

00:03:11,589 --> 00:03:07,840
in the shiny part it's 150 degrees

66

00:03:14,470 --> 00:03:11,599
and in the shade it's minus 120 degrees

67

00:03:16,630 --> 00:03:14,480
so let's take your marshmallow and take

68

00:03:18,790 --> 00:03:16,640
it outside well first there's no

69

00:03:21,270 --> 00:03:18,800
pressure and in a marshmallow there's

70

00:03:22,949 --> 00:03:21,280
all that sort of air pockets all trapped

71

00:03:25,830 --> 00:03:22,959
in there that's what makes it all spongy

72

00:03:27,509 --> 00:03:25,840
so your marshmallow would swell right up

73

00:03:29,030 --> 00:03:27,519
and then if it went outside in the dark

74

00:03:31,270 --> 00:03:29,040
if we were behind the earth your

75

00:03:32,869 --> 00:03:31,280
marshmallow would swell up and freeze

76

00:03:35,190 --> 00:03:32,879

and so you'd have like a

77

00:03:36,949 --> 00:03:35,200

a marshmallow snowball

78

00:03:38,710 --> 00:03:36,959

and if your marshmallow was in the sun

79

00:03:41,110 --> 00:03:38,720

if you went on the sunny side it would

80

00:03:42,949 --> 00:03:41,120

swell up and get all gooey not not like

81

00:03:46,070 --> 00:03:42,959

roasting a marshmallow but you'd have a

82

00:03:47,110 --> 00:03:46,080

big gooey mass of a marshmallow sort of

83

00:03:50,470 --> 00:03:47,120

like a big

84

00:03:51,990 --> 00:03:50,480

big eyeball or something so uh so

85

00:03:53,750 --> 00:03:52,000

marshmallows

86

00:03:55,670 --> 00:03:53,760

wouldn't be very good on the outside of

87

00:03:56,949 --> 00:03:55,680

the spaceship but if we had a

88

00:03:57,990 --> 00:03:56,959

marshmallow on the inside of the

89

00:04:04,070 --> 00:03:58,000

spaceship

90

00:04:09,589 --> 00:04:06,789

hi i'm madeline kushner from corpus

91

00:04:11,110 --> 00:04:09,599

christi in grade six and my question is

92

00:04:13,350 --> 00:04:11,120

you have been experiencing

93

00:04:15,830 --> 00:04:13,360

weightlessness for much longer than you

94

00:04:21,349 --> 00:04:15,840

have in your previous trips into space

95

00:04:25,670 --> 00:04:23,350

uh madeleine the big difference this

96

00:04:28,150 --> 00:04:25,680

time is is i'm used to it i can fly i

97

00:04:30,790 --> 00:04:28,160

can i can go all different directions i

98

00:04:32,629 --> 00:04:30,800

can i can do whatever i want it's it's

99

00:04:35,350 --> 00:04:32,639

wonderful being in weightlessness this

100

00:04:36,469 --> 00:04:35,360

time i'm i'm fully adapted to it i don't

101
00:04:39,270 --> 00:04:36,479
just feel

102
00:04:40,550 --> 00:04:39,280
like a visitor here now i i

103
00:04:42,710 --> 00:04:40,560
i feel

104
00:04:44,230 --> 00:04:42,720
like a spaceling i mean it's wonderful

105
00:04:46,870 --> 00:04:44,240
to get completely used to being

106
00:04:49,030 --> 00:04:46,880
weightless to have your body used to it

107
00:04:51,909 --> 00:04:49,040
i exercise two hours every day to keep

108
00:04:54,230 --> 00:04:51,919
myself strong but my body loves being in

109
00:04:56,710 --> 00:04:54,240
weightlessness it's just it's wonderful

110
00:05:02,230 --> 00:04:56,720
to be able to fly and float and

111
00:05:06,870 --> 00:05:04,310
to just be able to float things to each

112
00:05:09,510 --> 00:05:06,880
other through space it's it's uh it's

113
00:05:12,870 --> 00:05:09,520

like magic and and to be able to be here

114

00:05:21,189 --> 00:05:12,880

for that magic for five months is is a

115

00:05:25,670 --> 00:05:23,029

hi my name is nicholas yankovich from

116

00:05:27,670 --> 00:05:25,680

corpus christi school in grade six

117

00:05:33,590 --> 00:05:27,680

my question is how do you wash your

118

00:05:36,310 --> 00:05:35,189

how do we wash your hands nicholas i

119

00:05:38,469 --> 00:05:36,320

brought something to answer your

120

00:05:40,150 --> 00:05:38,479

question look closely at the camera you

121

00:05:42,230 --> 00:05:40,160

can see this

122

00:05:45,110 --> 00:05:42,240

it is no rinse

123

00:05:46,790 --> 00:05:45,120

body bath no rinse body bath and it's a

124

00:05:49,430 --> 00:05:46,800

bag with a straw so now let's

125

00:05:57,350 --> 00:05:49,440

demonstrate okay it's time to get clean

126
00:06:03,270 --> 00:05:59,270
so we have a big ball of water and you

127
00:06:07,110 --> 00:06:05,430
and now i've got water floating around

128
00:06:12,309 --> 00:06:07,120
on my hand

129
00:06:12,319 --> 00:06:21,029
and then grab a towel

130
00:06:24,870 --> 00:06:22,550
and dry them off

131
00:06:27,510 --> 00:06:24,880
so that's how we do it

132
00:06:29,189 --> 00:06:27,520
we use no rinse it's a special type of

133
00:06:30,950 --> 00:06:29,199
slightly soapy water so you don't need

134
00:06:33,350 --> 00:06:30,960
to have a bunch of fresh water

135
00:06:35,350 --> 00:06:33,360
afterwards you squirt it you float a

136
00:06:36,790 --> 00:06:35,360
ball of water in front of yourself

137
00:06:38,950 --> 00:06:36,800
and then you just dry your towel and

138
00:06:41,749 --> 00:06:38,960

when you're done we just tuck our towel

139

00:06:43,670 --> 00:06:41,759

somewhere to let it air dry so that the

140

00:06:45,270 --> 00:06:43,680

evaporated water gets back into the

141

00:06:47,350 --> 00:06:45,280

space station and we can use that water

142

00:06:48,870 --> 00:06:47,360

again so it works pretty well sort of

143

00:06:50,469 --> 00:06:48,880

like um

144

00:06:51,990 --> 00:06:50,479

maybe sort of like if you were on a

145

00:07:03,749 --> 00:06:52,000

sailboat and you needed to take it clean

146

00:07:09,830 --> 00:07:07,350

hello my name is melissa and i'm in

147

00:07:11,830 --> 00:07:09,840

grade six and i would like to know is

148

00:07:17,350 --> 00:07:11,840

being in zero gravity like swimming

149

00:07:20,870 --> 00:07:19,029

yeah it's sort of like swimming next

150

00:07:22,790 --> 00:07:20,880

time you're in a swimming pool

151
00:07:24,390 --> 00:07:22,800
um if you got a nice indoor pool there

152
00:07:25,830 --> 00:07:24,400
somewhere in ottawa that you go to or in

153
00:07:26,870 --> 00:07:25,840
the summertime when you're in a lake or

154
00:07:28,469 --> 00:07:26,880
a river

155
00:07:31,830 --> 00:07:28,479
try getting out in the water and

156
00:07:33,670 --> 00:07:31,840
completely relaxing every muscle relax

157
00:07:36,469 --> 00:07:33,680
every muscle in your body like i am

158
00:07:38,150 --> 00:07:36,479
right here and if you look at my arms my

159
00:07:39,670 --> 00:07:38,160
arms aren't down by my sides like on

160
00:07:41,189 --> 00:07:39,680
earth my arms

161
00:07:42,870 --> 00:07:41,199
float up

162
00:07:44,869 --> 00:07:42,880
and they sort of the same as water

163
00:07:46,629 --> 00:07:44,879

because there's no gravity pulling them

164

00:07:48,710 --> 00:07:46,639

down your whole body's like that my

165

00:07:51,430 --> 00:07:48,720

knees come up even my shirt floats up

166

00:07:53,909 --> 00:07:51,440

around me so it's more like

167

00:07:55,589 --> 00:07:53,919

floating in water all the time not not

168

00:07:58,150 --> 00:07:55,599

swimming in water because you can't pull

169

00:08:00,150 --> 00:07:58,160

against the air it doesn't i'll show you

170

00:08:02,629 --> 00:08:00,160

it won't take me anywhere

171

00:08:06,150 --> 00:08:02,639

it doesn't i just stand here because the

172

00:08:08,070 --> 00:08:06,160

air is not as thick as water so um

173

00:08:11,670 --> 00:08:08,080

so it's more like just floating in water

174

00:08:13,430 --> 00:08:11,680

forever it's it's a beautiful

175

00:08:14,710 --> 00:08:13,440

freedom it's lovely to be able to just

176

00:08:22,150 --> 00:08:14,720

float around

177

00:08:26,550 --> 00:08:24,710

hi my name is owen and i'm in grade six

178

00:08:28,070 --> 00:08:26,560

and i was wondering what would happen if

179

00:08:32,790 --> 00:08:28,080

you tried to paint something in zero

180

00:08:37,029 --> 00:08:35,990

tried to paint something in zero gravity

181

00:08:39,589 --> 00:08:37,039

hmm

182

00:08:41,430 --> 00:08:39,599

well we do a little bit of art up here

183

00:08:42,469 --> 00:08:41,440

but we don't have paints because most

184

00:08:44,550 --> 00:08:42,479

paints

185

00:08:47,509 --> 00:08:44,560

have a smell to them you know when you

186

00:08:50,790 --> 00:08:47,519

open a can of paint it's got that strong

187

00:08:52,150 --> 00:08:50,800

smell and on earth you know paint fumes

188

00:08:55,430 --> 00:08:52,160

you don't want to be locked in a small

189

00:08:57,590 --> 00:08:55,440

room spray painting because the fumes

190

00:08:59,110 --> 00:08:57,600

get really strong well the space station

191

00:09:02,310 --> 00:08:59,120

is closed

192

00:09:04,230 --> 00:09:02,320

every every smell that's in here

193

00:09:06,230 --> 00:09:04,240

there's no place for it to go there's no

194

00:09:08,630 --> 00:09:06,240

way for it to get processed except by my

195

00:09:10,949 --> 00:09:08,640

lungs or maybe by the equipment

196

00:09:13,350 --> 00:09:10,959

so most paints wouldn't be a good thing

197

00:09:15,190 --> 00:09:13,360

up here just because of the strong smell

198

00:09:17,110 --> 00:09:15,200

that they have and the chemicals that

199

00:09:18,949 --> 00:09:17,120

would come out of them but i think a

200

00:09:20,790 --> 00:09:18,959

little bit of painting would be nice we

201
00:09:24,470 --> 00:09:20,800
have artists who are astronauts who can

202
00:09:26,070 --> 00:09:24,480
draw and color use charcoal

203
00:09:28,230 --> 00:09:26,080
so i think a little bit of painting

204
00:09:36,310 --> 00:09:28,240
would be good but everything comes up

205
00:09:41,190 --> 00:09:39,190
my name is tom lane and i'm in grade six

206
00:09:47,190 --> 00:09:41,200
i'm wondering how long did it take to

207
00:09:51,350 --> 00:09:49,509
tom the space station is big i wish i

208
00:09:54,470 --> 00:09:51,360
could show you at all it's huge it's the

209
00:09:56,630 --> 00:09:54,480
size of five hockey rinks it's very big

210
00:09:58,630 --> 00:09:56,640
and each piece came up one at a time and

211
00:10:00,550 --> 00:09:58,640
we put them all together the cannon arm

212
00:10:03,190 --> 00:10:00,560
our big robot arm reached out and

213
00:10:05,110 --> 00:10:03,200

grabbed each piece and attached it as we

214

00:10:07,590 --> 00:10:05,120

built the station and made it bigger and

215

00:10:11,670 --> 00:10:07,600

bigger and the very first piece came up

216

00:10:13,750 --> 00:10:11,680

15 years ago in 1998. i was working down

217

00:10:15,990 --> 00:10:13,760

in mission control that day

218

00:10:17,829 --> 00:10:16,000

and we've slowly built it i helped build

219

00:10:20,150 --> 00:10:17,839

it back on my

220

00:10:21,590 --> 00:10:20,160

first flight up here back

221

00:10:23,829 --> 00:10:21,600

12 years ago

222

00:10:26,790 --> 00:10:23,839

people started living here

223

00:10:31,750 --> 00:10:29,110

yeah 12 years ago and

224

00:10:33,750 --> 00:10:31,760

i'm on expedition 35 so we've had people

225

00:10:35,350 --> 00:10:33,760

living here for a long time and we're

226

00:10:37,030 --> 00:10:35,360

still adding to it there's still pieces

227

00:10:39,269 --> 00:10:37,040

coming up i think you read maybe this

228

00:10:40,949 --> 00:10:39,279

week that there's a module that's that's

229

00:10:42,710 --> 00:10:40,959

inflatable that we're going to bring up

230

00:10:44,949 --> 00:10:42,720

in a couple years and the russians still

231

00:10:46,870 --> 00:10:44,959

have a laboratory to come up so it's

232

00:10:48,710 --> 00:10:46,880

it's slowly getting built it's it's like

233

00:10:51,190 --> 00:10:48,720

a city that you can never really say

234

00:10:52,790 --> 00:10:51,200

it's finished it started a long time ago

235

00:10:54,949 --> 00:10:52,800

and we slowly add to it and make it

236

00:10:57,430 --> 00:10:54,959

bigger and more capable and right now it

237

00:11:00,870 --> 00:10:57,440

is the biggest most powerful most

238

00:11:09,350 --> 00:11:00,880

capable uh human building laboratory in

239

00:11:13,350 --> 00:11:11,829

hi i'm luke jeez and i'm in grade six

240

00:11:18,630 --> 00:11:13,360

and i was wondering what happens when

241

00:11:22,710 --> 00:11:21,269

huh what happens when we sneeze in space

242

00:11:24,630 --> 00:11:22,720

well let's try

243

00:11:25,910 --> 00:11:24,640

okay i'll get myself set

244

00:11:28,550 --> 00:11:25,920

i'm going to sneeze let's see what

245

00:11:30,310 --> 00:11:28,560

happens let me get stable okay i'm going

246

00:11:35,509 --> 00:11:30,320

to turn sideways to see what happens

247

00:11:35,519 --> 00:11:38,630

nothing

248

00:11:44,870 --> 00:11:42,550

oh maybe i'm rotating a tiny bit

249

00:11:46,150 --> 00:11:44,880

so when you sneeze of course your body

250

00:11:49,350 --> 00:11:46,160

is trying to get something out of your

251

00:11:51,430 --> 00:11:49,360

nose and it pushes it out pretty fast

252

00:11:53,430 --> 00:11:51,440

so that that little bit of stuff pushing

253

00:11:55,990 --> 00:11:53,440

out of your nose would push you back

254

00:11:57,590 --> 00:11:56,000

very slightly but you have a lot of mass

255

00:11:59,269 --> 00:11:57,600

and the stuff coming out of your nose

256

00:12:01,509 --> 00:11:59,279

just as a tiny bit of mass so it doesn't

257

00:12:02,389 --> 00:12:01,519

move you very much

258

00:12:22,470 --> 00:12:02,399

so

259

00:12:22,480 --> 00:13:13,670

us

260

00:13:13,680 --> 00:13:21,750

gravity

261

00:13:28,230 --> 00:13:26,470

hi my name is father moreno and i'm in

262

00:13:31,030 --> 00:13:28,240

grade five

263

00:13:37,030 --> 00:13:31,040

why does the international space station

264

00:13:40,870 --> 00:13:39,350

why do we travel so fast

265

00:13:43,269 --> 00:13:40,880

um

266

00:13:44,790 --> 00:13:43,279

we stay in space because we're going

267

00:13:46,790 --> 00:13:44,800

fast

268

00:13:48,470 --> 00:13:46,800

we're going around the moon i'm sorry

269

00:13:50,710 --> 00:13:48,480

we're going around the world like the

270

00:13:51,990 --> 00:13:50,720

moon goes around the world

271

00:13:55,750 --> 00:13:52,000

and

272

00:13:57,670 --> 00:13:55,760

let me explain it like this if you

273

00:14:00,069 --> 00:13:57,680

went outside of the museum that you're

274

00:14:01,829 --> 00:14:00,079

in on the roof and jumped off the roof

275

00:14:04,389 --> 00:14:01,839

gravity would pull you right down and

276

00:14:06,069 --> 00:14:04,399

you'd get hurt if you ran right across

277

00:14:07,590 --> 00:14:06,079

the roof really fast run run run run run

278

00:14:09,750 --> 00:14:07,600

all the way across the roof and jumped

279

00:14:12,069 --> 00:14:09,760

off you'd go quite a ways but you'd

280

00:14:14,470 --> 00:14:12,079

still fall and hit the ground

281

00:14:18,069 --> 00:14:14,480

well imagine if you could go across that

282

00:14:20,710 --> 00:14:18,079

roof so fast so fast that you

283

00:14:23,110 --> 00:14:20,720

as you fell as you came off the roof the

284

00:14:25,189 --> 00:14:23,120

earth curved underneath you

285

00:14:28,069 --> 00:14:25,199

so that you were falling but you were

286

00:14:30,069 --> 00:14:28,079

going so fast that the earth was curving

287

00:14:32,710 --> 00:14:30,079

away from you so you never actually hit

288

00:14:35,430 --> 00:14:32,720

the ground you just kept falling and the

289

00:14:38,230 --> 00:14:35,440

earth kept curving you have to go really

290

00:14:40,310 --> 00:14:38,240

fast eight kilometers a second

291

00:14:43,430 --> 00:14:40,320

twenty eight thousand kilometers an hour

292

00:14:44,870 --> 00:14:43,440

but if you can get yourself going 500

293

00:14:45,750 --> 00:14:44,880

a minute

294

00:14:47,670 --> 00:14:45,760

then

295

00:14:50,069 --> 00:14:47,680

you will be weightless because you'll

296

00:14:52,069 --> 00:14:50,079

fall at exactly the same speed that the

297

00:14:54,550 --> 00:14:52,079

earth curves and that's why the space

298

00:15:10,310 --> 00:14:54,560

station has to go so fast to stay in

299

00:15:10,320 --> 00:15:38,710

me

300

00:15:38,720 --> 00:16:00,870

uh

301
00:16:00,880 --> 00:16:47,030
is

302
00:16:51,829 --> 00:16:49,430
hi my name

303
00:16:59,749 --> 00:16:51,839
and i'm is grade six and my question is

304
00:16:59,759 --> 00:17:04,150
what does it smell like

305
00:17:07,270 --> 00:17:05,829
it doesn't really have a strong

306
00:17:09,590 --> 00:17:07,280
distinctive

307
00:17:11,909 --> 00:17:09,600
smell it's not a bad smell at all

308
00:17:13,829 --> 00:17:11,919
it's maybe smells like

309
00:17:16,309 --> 00:17:13,839
being in an airplane

310
00:17:18,309 --> 00:17:16,319
if you go on to air canada or something

311
00:17:20,789 --> 00:17:18,319
and you walk onto the airplane it's

312
00:17:23,110 --> 00:17:20,799
maybe got a slightly distinctive smell

313
00:17:25,189 --> 00:17:23,120

but it's pretty clean and we we clean

314

00:17:26,630 --> 00:17:25,199

our every saturday i clean this whole

315

00:17:29,029 --> 00:17:26,640

laboratory we're inside the japanese

316

00:17:31,270 --> 00:17:29,039

laboratory i go through

317

00:17:33,990 --> 00:17:31,280

and i wipe down every handrail with

318

00:17:35,830 --> 00:17:34,000

disinfectant wipes with wet wipes and i

319

00:17:38,150 --> 00:17:35,840

vacuum all of the filters

320

00:17:39,750 --> 00:17:38,160

so we really work hard to keep it clean

321

00:17:41,190 --> 00:17:39,760

and so it really doesn't have any beds

322

00:17:43,110 --> 00:17:41,200

it's like being in a big building or

323

00:17:44,549 --> 00:17:43,120

maybe a nice clean hospital building or

324

00:17:46,070 --> 00:17:44,559

something

325

00:17:48,470 --> 00:17:46,080

we work hard to keep it smelling good

326

00:17:50,630 --> 00:17:48,480

and healthy it's good for our health and

327

00:17:52,070 --> 00:17:50,640

doesn't let any bacteria grow then it's

328

00:17:59,029 --> 00:17:52,080

better if it doesn't have a smell that

329

00:18:03,190 --> 00:18:01,430

hi my name is david greenwood and i was

330

00:18:05,270 --> 00:18:03,200

one and i'm in grade six and i was

331

00:18:06,710 --> 00:18:05,280

wondering about how much space junk is

332

00:18:13,750 --> 00:18:06,720

there in the earth's atmosphere that you

333

00:18:17,990 --> 00:18:16,870

all space is full of of you know junk or

334

00:18:19,110 --> 00:18:18,000

debris

335

00:18:22,470 --> 00:18:19,120

the earth

336

00:18:25,590 --> 00:18:22,480

gets hit by a hundred tons a day

337

00:18:27,590 --> 00:18:25,600

of space debris a hundred tons a day

338

00:18:28,950 --> 00:18:27,600

hits our earth every time you see a

339

00:18:30,870 --> 00:18:28,960

shooting star

340

00:18:33,270 --> 00:18:30,880

or um

341

00:18:35,029 --> 00:18:33,280

or you know a meteorite or something

342

00:18:37,350 --> 00:18:35,039

those are bits of debris coming from the

343

00:18:39,270 --> 00:18:37,360

universe a hundred tons a day

344

00:18:41,270 --> 00:18:39,280

some of it is human made only a

345

00:18:43,350 --> 00:18:41,280

little bit but there is some and from

346

00:18:46,470 --> 00:18:43,360

the space station though everything's

347

00:18:48,870 --> 00:18:46,480

going really really fast we are going

348

00:18:50,230 --> 00:18:48,880

uh five miles a second eight kilometers

349

00:18:52,310 --> 00:18:50,240

a second

350

00:18:54,630 --> 00:18:52,320

so all the debris is going faster than a

351

00:18:57,190 --> 00:18:54,640

bullet so you can't see it normally the

352

00:18:58,390 --> 00:18:57,200

only time i've ever seen space debris is

353

00:18:59,669 --> 00:18:58,400

when

354

00:19:01,750 --> 00:18:59,679

it burned up in the atmosphere

355

00:19:03,750 --> 00:19:01,760

underneath me and i watched a meteorite

356

00:19:06,549 --> 00:19:03,760

burn up in the atmosphere and that was

357

00:19:09,110 --> 00:19:06,559

kind of a spooky feeling because that

358

00:19:11,029 --> 00:19:09,120

meteorite could have hit us and not just

359

00:19:13,110 --> 00:19:11,039

been caught by the earth's gravity into

360

00:19:15,430 --> 00:19:13,120

the atmosphere but even though we know

361

00:19:18,230 --> 00:19:15,440

there's some around space is big

362

00:19:19,909 --> 00:19:18,240

and uh we get peppered by tiny bits all

363

00:19:23,350 --> 00:19:19,919

the time but the space station's a good

364

00:19:29,510 --> 00:19:23,360

ship big strong ship and uh so far so

365

00:19:34,549 --> 00:19:32,230

hello i'm sam lyon grade six and i was

366

00:19:36,870 --> 00:19:34,559

wondering if you play any games in space

367

00:19:39,029 --> 00:19:36,880

that you can't play with gravity or

368

00:19:46,070 --> 00:19:39,039

games that become more difficult or fun

369

00:19:50,310 --> 00:19:47,909

now this is a great place for games you

370

00:19:55,510 --> 00:19:50,320

would love it here imagine playing

371

00:19:59,190 --> 00:19:57,190

we where you could float into any

372

00:20:01,669 --> 00:19:59,200

cupboard you could you could hide up in

373

00:20:04,310 --> 00:20:01,679

the ceiling or in any sort of corner so

374

00:20:05,669 --> 00:20:04,320

it's a great place for that um but but

375

00:20:06,549 --> 00:20:05,679

we don't play hide and go seek very

376

00:20:08,789 --> 00:20:06,559

often

377

00:20:10,630 --> 00:20:08,799

um we're playing a game of scrabble

378

00:20:12,230 --> 00:20:10,640

right now but scrabble's pretty hard

379

00:20:14,710 --> 00:20:12,240

without gravity

380

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

because uh your pieces float all over so

381

00:20:19,029 --> 00:20:16,400

we have a scrabble game where the the

382

00:20:21,190 --> 00:20:19,039

pieces sort of click into place

383

00:20:22,950 --> 00:20:21,200

our our board is up on the ceiling you

384

00:20:24,390 --> 00:20:22,960

could play darts here

385

00:20:27,029 --> 00:20:24,400

but you wouldn't want pointy darts

386

00:20:29,029 --> 00:20:27,039

because we're inside a a spaceship but

387

00:20:30,870 --> 00:20:29,039

um you know if your dart just had a big

388

00:20:35,029 --> 00:20:30,880

lump on the end with velcro and you

389

00:20:36,549 --> 00:20:35,039

threw it nice and slowly maybe with big

390

00:20:38,470 --> 00:20:36,559

feathers on the end then you could play

391

00:20:40,310 --> 00:20:38,480

darts but when you throw darts on earth

392

00:20:42,630 --> 00:20:40,320

gravity pulls them so they curve as you

393

00:20:43,990 --> 00:20:42,640

throw them here they would go straight

394

00:20:46,230 --> 00:20:44,000

you could throw your dart and it would

395

00:20:48,230 --> 00:20:46,240

go absolutely straight all the way to

396

00:20:49,750 --> 00:20:48,240

the target because there wouldn't be a

397

00:20:51,669 --> 00:20:49,760

curve of gravity

398

00:20:53,270 --> 00:20:51,679

so i think you know this would be a fun

399

00:20:55,590 --> 00:20:53,280

place to figure out how to play a bunch

400

00:20:57,669 --> 00:20:55,600

of games and we play a little in our

401
00:21:00,549 --> 00:20:57,679
spare time but mostly we're here to work

402
00:21:01,830 --> 00:21:00,559
and and so we don't we don't experiment

403
00:21:08,390 --> 00:21:01,840
like you would if you just actually

404
00:21:12,549 --> 00:21:10,310
hi my name is niket

405
00:21:14,950 --> 00:21:12,559
i'm from i'm in grade 6. i just want to

406
00:21:20,070 --> 00:21:14,960
know what inspired you to be an

407
00:21:23,669 --> 00:21:21,590
well you're in grade six so you're

408
00:21:25,909 --> 00:21:23,679
probably about 10 or 11 maybe 12 years

409
00:21:28,230 --> 00:21:25,919
old probably 10 or 11.

410
00:21:30,950 --> 00:21:29,830
you know you've probably heard of some

411
00:21:33,190 --> 00:21:30,960
people

412
00:21:34,870 --> 00:21:33,200
that have done really interesting things

413
00:21:37,110 --> 00:21:34,880

in their life someone who's done

414

00:21:38,950 --> 00:21:37,120

something that you think wow that's cool

415

00:21:41,110 --> 00:21:38,960

or or you've seen someone do something

416

00:21:43,510 --> 00:21:41,120

you think oh that's that's not good

417

00:21:44,870 --> 00:21:43,520

well you're going to grow up to be one

418

00:21:46,390 --> 00:21:44,880

of those people

419

00:21:48,230 --> 00:21:46,400

you're going to grow up to be somebody

420

00:21:50,149 --> 00:21:48,240

and you're going to do something when

421

00:21:52,630 --> 00:21:50,159

you when you get to be an adult

422

00:21:54,070 --> 00:21:52,640

and when i was your age i looked at what

423

00:21:56,310 --> 00:21:54,080

some of the people were doing and i

424

00:21:57,750 --> 00:21:56,320

watched the very first people walk on

425

00:21:59,669 --> 00:21:57,760

the moon

426
00:22:01,430 --> 00:21:59,679
the very first two human beings walked

427
00:22:03,750 --> 00:22:01,440
in the moon when i was 10 years old

428
00:22:06,390 --> 00:22:03,760
almost 10 this summer i turned 10. and

429
00:22:07,990 --> 00:22:06,400
that's what inspired me i just thought

430
00:22:10,149 --> 00:22:08,000
i'm going to grow up to be something why

431
00:22:11,669 --> 00:22:10,159
don't i grow up to be that

432
00:22:14,630 --> 00:22:11,679
that looks like an interesting thing to

433
00:22:16,470 --> 00:22:14,640
do and i knew it probably was impossible

434
00:22:18,390 --> 00:22:16,480
but i thought if i don't try it's

435
00:22:20,789 --> 00:22:18,400
definitely going to be impossible and

436
00:22:23,350 --> 00:22:20,799
even if i don't get to fly in space all

437
00:22:25,430 --> 00:22:23,360
those things of learning to fly and

438
00:22:28,070 --> 00:22:25,440

build spaceships and how to make

439

00:22:30,549 --> 00:22:28,080

machinery and how to test things and all

440

00:22:33,270 --> 00:22:30,559

about navigation about geology and

441

00:22:34,230 --> 00:22:33,280

geography it's all interesting

442

00:22:36,549 --> 00:22:34,240

and so

443

00:22:38,630 --> 00:22:36,559

i was inspired to become an astronaut by

444

00:22:43,590 --> 00:22:38,640

two of the very first explorers the

445

00:22:47,990 --> 00:22:46,070

chris this was our last question but

446

00:22:50,310 --> 00:22:48,000

maybe the uh here's the clancy wants to

447

00:22:52,149 --> 00:22:50,320

add a few words well chris thank you so

448

00:22:53,990 --> 00:22:52,159

much thanks for those wonderful

449

00:22:55,990 --> 00:22:54,000

explanations to the great questions from

450

00:22:58,549 --> 00:22:56,000

the students here keep the amazing

451

00:23:00,310 --> 00:22:58,559

photos coming from space and uh you're a

452

00:23:02,710 --> 00:23:00,320

wonderful ambassador for canada and for

453

00:23:05,270 --> 00:23:02,720

the whole world be sure that eddie stays

454

00:23:06,950 --> 00:23:05,280

on best behavior and keeps his notes

455

00:23:08,549 --> 00:23:06,960

because when you and he come back we're

456

00:23:10,310 --> 00:23:08,559

looking for some tremendous stories

457

00:23:11,350 --> 00:23:10,320

thanks chris

458

00:23:14,070 --> 00:23:11,360

bravo

459

00:23:23,909 --> 00:23:14,080

thanks chris trying to execute

460

00:23:27,590 --> 00:23:25,510

thank you very much your excellency it's

461

00:23:29,510 --> 00:23:27,600

a privilege to talk to you and a delight

462

00:23:31,909 --> 00:23:29,520

to talk to young canadians in ottawa

463

00:23:34,470 --> 00:23:31,919

today thank you for having me there and

464

00:23:36,390 --> 00:23:34,480

i got to get back to work but uh it's a

465

00:23:39,110 --> 00:23:36,400

great museum there's a lot of canadian

466

00:23:41,110 --> 00:23:39,120

history there enjoy your time and nice

467

00:23:42,390 --> 00:23:41,120

to see you all i will take care of eddie

468

00:23:44,390 --> 00:23:42,400

for sure

469

00:23:46,149 --> 00:23:44,400

bye now

470

00:23:50,549 --> 00:23:46,159

a station this is houston acr that

471

00:23:56,630 --> 00:23:53,190

thank you governor general students and

472

00:23:58,789 --> 00:23:56,640

canada aviation and space museum station