



1
00:00:04,670 --> 00:00:02,869
hi my name is Jeanette Epps hi I'm NASA

2
00:00:06,410 --> 00:00:04,680
astronaut Kayla Barron I am NASA

3
00:00:07,610 --> 00:00:06,420
astronaut Charlie Lundgren I just got

4
00:00:09,410 --> 00:00:07,620
back from the International Space

5
00:00:11,209 --> 00:00:09,420
Station a few weeks ago it's awesome to

6
00:00:13,310 --> 00:00:11,219
be back with my family and friends to be

7
00:00:15,230 --> 00:00:13,320
back here on the earth I do love to get

8
00:00:17,210 --> 00:00:15,240
real letters whether it's at home or at

9
00:00:18,950 --> 00:00:17,220
work or even in space we get cards and

10
00:00:20,689 --> 00:00:18,960
letters delivered from family from time

11
00:00:22,189 --> 00:00:20,699
to time which is so exciting and this

12
00:00:24,950 --> 00:00:22,199
year we'd like to thank all the students

13
00:00:26,689 --> 00:00:24,960

who sent in letters and notes to us and

14

00:00:28,910 --> 00:00:26,699

this is one of my favorite things to do

15

00:00:30,390 --> 00:00:28,920

is to read your letters so let's get to

16

00:00:36,410 --> 00:00:30,400

it

17

00:00:38,090 --> 00:00:36,420

[Music]

18

00:00:40,910 --> 00:00:38,100

the first time you went into space how

19

00:00:44,209 --> 00:00:40,920

did it feel were you scared or happy my

20

00:00:46,190 --> 00:00:44,219

first base launch was incredible we were

21

00:00:48,049 --> 00:00:46,200

super well prepared so I think for the

22

00:00:49,610 --> 00:00:48,059

most part we were just executing the

23

00:00:52,069 --> 00:00:49,620

procedures doing the job we had

24

00:00:54,770 --> 00:00:52,079

practiced doing but as we counted down

25

00:00:57,290 --> 00:00:54,780

you know the famous countdown from 10 9

26

00:00:59,330 --> 00:00:57,300

8 up to that moment of launch the rocket

27

00:01:01,549 --> 00:00:59,340

engines light underneath us and there's

28

00:01:03,650 --> 00:01:01,559

kind of This Magic Moment where you hang

29

00:01:04,969 --> 00:01:03,660

in the air you're just off the launch

30

00:01:06,410 --> 00:01:04,979

pad and you can feel that you're

31

00:01:08,030 --> 00:01:06,420

starting to travel to space but you

32

00:01:10,370 --> 00:01:08,040

haven't really started accelerating yet

33

00:01:13,789 --> 00:01:10,380

and in that moment I was just flooded

34

00:01:15,950 --> 00:01:13,799

with pure joy I was just so excited that

35

00:01:18,109 --> 00:01:15,960

my journey was finally starting and so

36

00:01:20,270 --> 00:01:18,119

excited to do it with my teammates my

37

00:01:22,670 --> 00:01:20,280

crew and our team around the world and

38

00:01:25,070 --> 00:01:22,680

so yeah it was I was happy more than

39

00:01:32,810 --> 00:01:25,080

anything else

40

00:01:37,969 --> 00:01:34,910

put that on my refrigerator oh look at

41

00:01:39,950 --> 00:01:37,979

this this makes my day how great is that

42

00:01:42,530 --> 00:01:39,960

that's going up on the wall for sure

43

00:01:44,030 --> 00:01:42,540

I love those colors love it

44

00:01:46,550 --> 00:01:44,040

I had a bowl of cereal and milk for

45

00:01:47,990 --> 00:01:46,560

breakfast I had chili for lunch and

46

00:01:49,190 --> 00:01:48,000

every now and then you open these up and

47

00:01:51,170 --> 00:01:49,200

you learn what like somebody's favorite

48

00:01:53,569 --> 00:01:51,180

food is is there cheese to eat in your

49

00:01:55,550 --> 00:01:53,579

spaceship I love cheese oh my gosh me

50

00:01:57,530 --> 00:01:55,560

too actually it's really hard to send

51
00:01:59,210 --> 00:01:57,540
cheese to space because it goes bad

52
00:02:01,249 --> 00:01:59,220
pretty quickly but you can send some

53
00:02:03,770 --> 00:02:01,259
hard cheeses to space so I really hope

54
00:02:07,069 --> 00:02:03,780
that that's there in my spaceship Sarah

55
00:02:09,169 --> 00:02:07,079
says I think space is very cool but I

56
00:02:12,350 --> 00:02:09,179
think space ice cream would be the best

57
00:02:14,150 --> 00:02:12,360
part Sarah you know all that there is to

58
00:02:17,089 --> 00:02:14,160
know because you're absolutely right

59
00:02:19,130 --> 00:02:17,099
space ice cream is very cool and cold do

60
00:02:20,869 --> 00:02:19,140
you like chicken nuggets I love all

61
00:02:22,010 --> 00:02:20,879
chicken nuggets I'm sure there's

62
00:02:23,869 --> 00:02:22,020
somebody out there that does not like

63
00:02:25,190 --> 00:02:23,879

chicken nuggets but that is not me so I

64

00:02:27,410 --> 00:02:25,200

think the bigger chicken nugget question

65

00:02:29,030 --> 00:02:27,420

is how do you eat your chicken nuggets

66

00:02:30,650 --> 00:02:29,040

with a fork and knife dip them in

67

00:02:32,930 --> 00:02:30,660

ketchup are you kind of a mayonnaise or

68

00:02:34,910 --> 00:02:32,940

a mustard person or is it just straight

69

00:02:36,830 --> 00:02:34,920

up I've got 18 chicken nuggets in front

70

00:02:39,770 --> 00:02:36,840

of me and I'm getting after it all right

71

00:02:41,089 --> 00:02:39,780

now so I don't care how you eat yours

72

00:02:42,530 --> 00:02:41,099

but I'll tell you how I eat mine I

73

00:02:43,850 --> 00:02:42,540

definitely like chicken nuggets I like a

74

00:02:46,309 --> 00:02:43,860

little bit of ketchup and I definitely

75

00:02:48,770 --> 00:02:46,319

use my fingers it's a great question and

76

00:02:51,050 --> 00:02:48,780

I hope you have a uh a wonderful holiday

77

00:02:53,270 --> 00:02:51,060

season Charlie so what type of rocket

78

00:02:56,570 --> 00:02:53,280

ship did you go on well this most recent

79

00:02:59,210 --> 00:02:56,580

Mission I flew in a crew Dragon capsule

80

00:03:01,009 --> 00:02:59,220

on top of a Falcon 9 rocket it was

81

00:03:02,809 --> 00:03:01,019

absolutely amazing we launched from

82

00:03:04,490 --> 00:03:02,819

Kennedy Space Center and we were in low

83

00:03:06,470 --> 00:03:04,500

earth orbit in less than nine minutes

84

00:03:08,809 --> 00:03:06,480

now my first mission about seven years

85

00:03:11,690 --> 00:03:08,819

ago I launched in a soyuz capsule on a

86

00:03:13,490 --> 00:03:11,700

soyuz rocket out of baikonur cosmodrome

87

00:03:16,250 --> 00:03:13,500

and Kazakhstan I launched with our

88

00:03:17,930 --> 00:03:16,260

Russian partners and and that was my

89

00:03:20,990 --> 00:03:17,940

first flight and so it was really cool

90

00:03:23,149 --> 00:03:21,000

to have that experience of flying into

91

00:03:24,710 --> 00:03:23,159

space on two different types of rockets

92

00:03:26,750 --> 00:03:24,720

what's your favorite thing about your

93

00:03:29,089 --> 00:03:26,760

job well Piper one of my favorite things

94

00:03:31,490 --> 00:03:29,099

about my job is that I continue to learn

95

00:03:34,190 --> 00:03:31,500

new things just about every day flying

96

00:03:35,509 --> 00:03:34,200

in the t-38 doing robotics just about

97

00:03:37,250 --> 00:03:35,519

everything that we do here there's

98

00:03:38,809 --> 00:03:37,260

always something new going on and I like

99

00:03:40,970 --> 00:03:38,819

to learn this is cool this is a launch

100

00:03:43,789 --> 00:03:40,980

pad look at that

101
00:03:46,250 --> 00:03:43,799
very detailed from Gabe Gabe that's

102
00:03:47,690 --> 00:03:46,260
awesome I see we got the we got the pad

103
00:03:49,670 --> 00:03:47,700
here we got the Gantry that we walk

104
00:03:51,830 --> 00:03:49,680
across into the capsule there with the

105
00:03:54,229 --> 00:03:51,840
astronauts inside that is a great

106
00:03:56,270 --> 00:03:54,239
drawing Gabe good job can you feel heat

107
00:03:58,430 --> 00:03:56,280
in the spaceship especially when we're

108
00:03:59,990 --> 00:03:58,440
coming home that our spacecraft gets

109
00:04:01,850 --> 00:04:00,000
really hot that's why we have a heat

110
00:04:03,350 --> 00:04:01,860
shield that protects us as our

111
00:04:04,910 --> 00:04:03,360
spacecraft starts to travel through the

112
00:04:06,589 --> 00:04:04,920
atmosphere because all of that

113
00:04:09,110 --> 00:04:06,599

resistance of the gases in the

114

00:04:11,570 --> 00:04:09,120

atmosphere really cause the the craft to

115

00:04:13,610 --> 00:04:11,580

heat up but we're in suits that give us

116

00:04:14,570 --> 00:04:13,620

cooling so they keep our bodies cool and

117

00:04:16,550 --> 00:04:14,580

it's kind of like you have air

118

00:04:18,110 --> 00:04:16,560

conditioning so even though the vehicle

119

00:04:19,430 --> 00:04:18,120

gets really hot the spaceship gets

120

00:04:21,110 --> 00:04:19,440

really hot we stay at a comfortable

121

00:04:23,689 --> 00:04:21,120

temperature what types of things do we

122

00:04:26,510 --> 00:04:23,699

do in outer space right now we're in low

123

00:04:29,150 --> 00:04:26,520

earth orbit so that's where the space

124

00:04:32,210 --> 00:04:29,160

station is we do two main things there

125

00:04:33,830 --> 00:04:32,220

one is to keep it functioning and keep

126
00:04:36,409 --> 00:04:33,840
it working because it's a complex

127
00:04:38,510 --> 00:04:36,419
machine there in low earth orbit the

128
00:04:40,189 --> 00:04:38,520
other thing we do is we do research

129
00:04:41,390 --> 00:04:40,199
there and a lot of our time is trying to

130
00:04:44,510 --> 00:04:41,400
understand the human body body

131
00:04:47,749 --> 00:04:44,520
understand different things that we need

132
00:04:51,530 --> 00:04:47,759
to take the next step to the Moon to

133
00:04:53,749 --> 00:04:51,540
stay and after that to Mars and so to

134
00:04:56,390 --> 00:04:53,759
keep exploring we have to keep learning

135
00:04:58,670 --> 00:04:56,400
I love not knowing what is inside each

136
00:05:00,290 --> 00:04:58,680
of these letters hey this one from Evan

137
00:05:03,350 --> 00:05:00,300
is really cool the drawings are always

138
00:05:07,070 --> 00:05:03,360

my favorite from Abigail in St George

139

00:05:09,830 --> 00:05:07,080

Utah used a really awesome castronaut

140

00:05:11,990 --> 00:05:09,840

sticker here who doesn't love a cat on a

141

00:05:14,090 --> 00:05:12,000

flying saucer do astronauts believe in

142

00:05:16,189 --> 00:05:14,100

aliens well that's a good question I

143

00:05:18,710 --> 00:05:16,199

don't know some maybe do and some maybe

144

00:05:21,050 --> 00:05:18,720

don't I think it would be amazing to

145

00:05:22,730 --> 00:05:21,060

discover aliens in our lifetime from my

146

00:05:24,409 --> 00:05:22,740

perspective aliens probably don't look

147

00:05:27,110 --> 00:05:24,419

like little green men but they might be

148

00:05:28,670 --> 00:05:27,120

like tiny microorganisms that live or

149

00:05:32,090 --> 00:05:28,680

used to live on a planet like Mars

150

00:05:34,310 --> 00:05:32,100

unequivocally 100 I believe in aliens

151

00:05:36,230 --> 00:05:34,320

there is no way that you can be on the

152

00:05:38,510 --> 00:05:36,240

space station going around the earth and

153

00:05:40,969 --> 00:05:38,520

look out at night and see millions of

154

00:05:42,710 --> 00:05:40,979

stars and not think for certain there

155

00:05:44,330 --> 00:05:42,720

are aliens out there and people ask me

156

00:05:46,610 --> 00:05:44,340

if I've ever seen an alien and I say

157

00:05:48,230 --> 00:05:46,620

absolutely 100 I've seen aliens because

158

00:05:50,450 --> 00:05:48,240

you're looking at them every night when

159

00:05:52,370 --> 00:05:50,460

you look out in the night sky somewhere

160

00:05:54,950 --> 00:05:52,380

out there there is some crazy

161

00:05:56,510 --> 00:05:54,960

civilization doing some crazy work that

162

00:05:58,310 --> 00:05:56,520

we haven't discovered yet I know it is

163

00:05:59,930 --> 00:05:58,320

out there thank you all so so much for

164

00:06:02,210 --> 00:05:59,940

the letters that you write to us it

165

00:06:05,270 --> 00:06:02,220

means so much to receive them and I love

166

00:06:07,670 --> 00:06:05,280

reading every single one thank you these

167

00:06:09,830 --> 00:06:07,680

letters are the rocket fuel that we use

168

00:06:11,450 --> 00:06:09,840

this is what keeps us going so please

169

00:06:13,790 --> 00:06:11,460

don't stop setting them please keep

170

00:06:15,590 --> 00:06:13,800

sending them and help us push this

171

00:06:18,469 --> 00:06:15,600

Mission forward because it's super

172

00:06:19,969 --> 00:06:18,479

important thank you thanks everybody for

173

00:06:23,090 --> 00:06:19,979

all your letters and your awesome

174

00:06:25,670 --> 00:06:23,100

questions the curiosity is awesome and I

175

00:06:27,710 --> 00:06:25,680

hope you stay engaged in thinking about

176

00:06:29,450 --> 00:06:27,720

how the world and the universe works

177

00:06:31,969 --> 00:06:29,460

thank you for your letters keep them

178

00:06:33,950 --> 00:06:31,979

coming have a great holiday I am so

179

00:06:35,930 --> 00:06:33,960

thankful to uh to be back here on Earth

180

00:06:38,450 --> 00:06:35,940

with my family and friends and I wish

181

00:06:40,309 --> 00:06:38,460

you all the best this holiday season as

182

00:06:42,110 --> 00:06:40,319

you spend time with your family with

183

00:06:43,590 --> 00:06:42,120

your friends on our incredible Planet

184

00:06:49,990 --> 00:06:43,600

our home the Earth

185

00:06:52,660 --> 00:06:50,000

[Music]