



1  
00:03:30,830 --> 00:00:23,880

[Music]

2  
00:03:30,840 --> 00:03:36,850

ah

3  
00:04:38,950 --> 00:03:59,890

[Music]

4  
00:04:42,150 --> 00:04:41,350  
this rover is the beginning of the next

5  
00:04:44,390 --> 00:04:42,160  
generation

6  
00:04:47,030 --> 00:04:44,400  
of mars missions whose purpose is to

7  
00:04:49,749 --> 00:04:47,040  
prepare mars samples for return to earth

8  
00:04:51,830 --> 00:04:49,759  
and pave the way for eventual human

9  
00:04:54,870 --> 00:04:51,840  
exploration of mars

10  
00:04:57,270 --> 00:04:54,880  
for nearly a decade over 3 000

11  
00:04:58,150 --> 00:04:57,280  
team members from nasa's jet propulsion

12  
00:05:00,150 --> 00:04:58,160  
laboratory

13  
00:05:01,909 --> 00:05:00,160

and partners from around the world have

14

00:05:04,310 --> 00:05:01,919

put their hearts and souls

15

00:05:06,310 --> 00:05:04,320

and many long hours into building the

16

00:05:09,029 --> 00:05:06,320

most technologically advanced

17

00:05:10,310 --> 00:05:09,039

interplanetary vehicle we've ever sent

18

00:05:13,430 --> 00:05:10,320

to mars

19

00:05:15,749 --> 00:05:13,440

with seven instruments 23 cameras

20

00:05:17,749 --> 00:05:15,759

a robotic arm and state-of-the-art

21

00:05:19,830 --> 00:05:17,759

mobility and sampling systems

22

00:05:21,350 --> 00:05:19,840

we've given it everything it needs to

23

00:05:24,550 --> 00:05:21,360

succeed in its mission

24

00:05:25,510 --> 00:05:24,560

except a name so nasa asks students from

25

00:05:27,430 --> 00:05:25,520

around the country

26

00:05:28,950 --> 00:05:27,440

to submit their ideas for the rover's

27

00:05:32,469 --> 00:05:28,960

name now

28

00:05:34,710 --> 00:05:32,479

28 000 entries and 770 000

29

00:05:36,710 --> 00:05:34,720

votes from the public later we are here

30

00:05:55,909 --> 00:05:36,720

today to reveal the name

31

00:05:59,830 --> 00:05:58,870

welcome to nasa's jet propulsion

32

00:06:03,350 --> 00:05:59,840

laboratory

33

00:06:06,070 --> 00:06:03,360

in california this is where the mars

34

00:06:08,150 --> 00:06:06,080

2020 rover was built i'm raquel

35

00:06:10,469 --> 00:06:08,160

villanueva and i'm here today with

36

00:06:11,510 --> 00:06:10,479

many of the engineers and scientists who

37

00:06:13,670 --> 00:06:11,520

built the rover

38

00:06:15,590 --> 00:06:13,680

and will operate it once it lands on

39

00:06:18,150 --> 00:06:15,600

mars they're waiting

40

00:06:19,430 --> 00:06:18,160

just like you to find out which name has

41

00:06:21,430 --> 00:06:19,440

been selected from the

42

00:06:23,670 --> 00:06:21,440

thousands of entries submitted by

43

00:06:25,590 --> 00:06:23,680

students all across the country

44

00:06:29,670 --> 00:06:25,600

now is everyone here excited to hear the

45

00:06:34,950 --> 00:06:33,510

it sounds like it now we'll be back here

46

00:06:37,110 --> 00:06:34,960

soon to show you

47

00:06:37,990 --> 00:06:37,120

where the name will go on the rover but

48

00:06:40,150 --> 00:06:38,000

for now

49

00:06:41,110 --> 00:06:40,160

let's head on over to a school somewhere

50

00:06:44,309 --> 00:06:41,120

in america

51  
00:06:45,189 --> 00:06:44,319  
to find out the name of nasa's next mars

52  
00:06:47,189 --> 00:06:45,199  
rover

53  
00:06:49,830 --> 00:06:47,199  
d'am bell is one of our partners in the

54  
00:06:50,629 --> 00:06:49,840  
contest and she is joining us live right

55  
00:06:52,870 --> 00:06:50,639  
now

56  
00:06:57,270 --> 00:06:52,880  
deanne can you tell us what's going on

57  
00:06:57,280 --> 00:07:01,189  
i would love to recall

58  
00:07:06,629 --> 00:07:04,390  
you guys over at jpl are incredible

59  
00:07:08,629 --> 00:07:06,639  
you are sending us to all kinds of

60  
00:07:11,749 --> 00:07:08,639  
places in our solar system

61  
00:07:14,790 --> 00:07:11,759  
it is beyond impressive and exciting and

62  
00:07:16,629 --> 00:07:14,800  
speaking of exciting this is the big day

63  
00:07:20,230 --> 00:07:16,639

where we find out the name

64

00:07:22,390 --> 00:07:20,240

of nasa's next mars rover this journey

65

00:07:25,909 --> 00:07:22,400

started back in august we had 28

66

00:07:26,629 --> 00:07:25,919

000 entries 4 700 judges and it's all

67

00:07:29,110 --> 00:07:26,639

brought us

68

00:07:30,710 --> 00:07:29,120

right here to learn that winning name i

69

00:07:44,150 --> 00:07:30,720

am in burke virginia

70

00:07:49,589 --> 00:07:44,160

at lake braddock secondary school blake

71

00:07:52,790 --> 00:07:51,670

so my name is deanne i'm with future

72

00:07:55,110 --> 00:07:52,800

engineers one of the partner

73

00:07:56,790 --> 00:07:55,120

organizations that put on this contest

74

00:07:59,189 --> 00:07:56,800

and i bet we have some future engineers

75

00:08:02,550 --> 00:07:59,199

in this room and some future scientists

76  
00:08:05,589 --> 00:08:02,560  
and some future explorers and guess what

77  
00:08:06,629 --> 00:08:05,599  
we are the artemis generation we are

78  
00:08:09,670 --> 00:08:06,639  
sending humans

79  
00:08:12,230 --> 00:08:09,680  
back to the moon we are exploring mars

80  
00:08:14,230 --> 00:08:12,240  
and i cannot wait to find out the name

81  
00:08:15,430 --> 00:08:14,240  
for the next robotic explorer headed to

82  
00:08:17,350 --> 00:08:15,440  
mars

83  
00:08:19,749 --> 00:08:17,360  
so without further ado i'm going to

84  
00:08:21,749 --> 00:08:19,759  
bring up two very important people

85  
00:08:23,670 --> 00:08:21,759  
we have two of nasa's top leading

86  
00:08:26,710 --> 00:08:23,680  
scientists we have dr

87  
00:08:27,350 --> 00:08:26,720  
thomas zurbukin also known as dr z he's

88  
00:08:30,230 --> 00:08:27,360

in charge of

89

00:08:32,149 --> 00:08:30,240

all of science at nasa and he has a

90

00:08:35,430 --> 00:08:32,159

personal preference for the sun

91

00:08:37,670 --> 00:08:35,440

and also the planet mercury he's also

92

00:08:39,350 --> 00:08:37,680

accompanied by dr lori glaze back here

93

00:08:40,790 --> 00:08:39,360

she's in charge of all of planetary

94

00:08:43,190 --> 00:08:40,800

science at nasa

95

00:08:45,509 --> 00:08:43,200

and she loves volcanoes but not the ones

96

00:08:47,350 --> 00:08:45,519

here the ones in our solar system

97

00:08:48,710 --> 00:08:47,360

so without further ado i'm going to let

98

00:08:56,070 --> 00:08:48,720

dr z take it away

99

00:09:01,030 --> 00:08:59,110

hey thank you deanne and hi everybody

100

00:09:02,870 --> 00:09:01,040

here at the high school at chapel and

101  
00:09:05,110 --> 00:09:02,880  
everywhere around the world we're making

102  
00:09:08,470 --> 00:09:05,120  
history right now

103  
00:09:09,670 --> 00:09:08,480  
we're making history right here today we

104  
00:09:13,190 --> 00:09:09,680  
are naming

105  
00:09:14,790 --> 00:09:13,200  
a spacecraft that will go to mars

106  
00:09:16,310 --> 00:09:14,800  
and make measurements we've never made

107  
00:09:18,630 --> 00:09:16,320  
before

108  
00:09:20,710 --> 00:09:18,640  
it will be the first leg of the first

109  
00:09:23,750 --> 00:09:20,720  
round trip of humanity

110  
00:09:25,350 --> 00:09:23,760  
to mars bringing back these samples that

111  
00:09:28,550 --> 00:09:25,360  
tell us secrets about

112  
00:09:28,560 --> 00:09:34,829  
and the name of this mission

113  
00:09:40,200 --> 00:09:37,290

is

114

00:09:48,829 --> 00:09:40,210

[Music]

115

00:09:48,839 --> 00:10:02,230

perseverance

116

00:10:02,240 --> 00:10:06,870

you know curiosity got

117

00:10:10,550 --> 00:10:09,670

to planet mars when many of you are

118

00:10:14,550 --> 00:10:10,560

babies or

119

00:10:16,230 --> 00:10:14,560

little kids and curiosity is what we

120

00:10:18,870 --> 00:10:16,240

need when we explore

121

00:10:21,110 --> 00:10:18,880

it pulls it forward it's about that

122

00:10:21,829 --> 00:10:21,120

motivation to explore beyond what's

123

00:10:25,430 --> 00:10:21,839

there

124

00:10:27,030 --> 00:10:25,440

curiosity is always part of exploration

125

00:10:29,430 --> 00:10:27,040

but when you flip over that metal you

126

00:10:32,470 --> 00:10:29,440

look at the other side what is there

127

00:10:33,990 --> 00:10:32,480

it's perseverance there has never been

128

00:10:36,949 --> 00:10:34,000

expiration

129

00:10:38,310 --> 00:10:36,959

never never be making history without

130

00:10:44,230 --> 00:10:38,320

perseverance

131

00:10:46,230 --> 00:10:44,240

what exploration is all about

132

00:10:49,110 --> 00:10:46,240

perseverance is a strong world

133

00:10:49,829 --> 00:10:49,120

a word it's about making progress

134

00:10:51,990 --> 00:10:49,839

despite

135

00:10:53,110 --> 00:10:52,000

obstacles everybody who's ever tried

136

00:10:56,230 --> 00:10:53,120

building hardware

137

00:10:59,269 --> 00:10:56,240

i tried knows how important it is

138

00:11:01,990 --> 00:10:59,279

and it will be important for this rover

139

00:11:05,269 --> 00:11:02,000

today but as we go forward

140

00:11:07,110 --> 00:11:05,279

space exploration is hard and it's

141

00:11:07,910 --> 00:11:07,120

difficult it has been difficult in the

142

00:11:10,470 --> 00:11:07,920

past

143

00:11:11,670 --> 00:11:10,480

but it's so exciting and we need

144

00:11:14,150 --> 00:11:11,680

everybody

145

00:11:15,190 --> 00:11:14,160

to engage we need the artemis generation

146

00:11:18,710 --> 00:11:15,200

in this room

147

00:11:19,829 --> 00:11:18,720

all of you and many more in the united

148

00:11:24,150 --> 00:11:19,839

states

149

00:11:27,190 --> 00:11:24,160

and beyond we go together to mars

150

00:11:28,069 --> 00:11:27,200

together with the united states and with

151  
00:11:30,550 --> 00:11:28,079  
our international

152  
00:11:31,590 --> 00:11:30,560  
and commercial communities and the

153  
00:11:34,550 --> 00:11:31,600  
perseverance

154  
00:11:36,310 --> 00:11:34,560  
rover will lead the way to the next

155  
00:11:38,870 --> 00:11:36,320  
generation

156  
00:11:39,829 --> 00:11:38,880  
of exploration exploration that at this

157  
00:11:41,990 --> 00:11:39,839  
moment in time

158  
00:11:43,590 --> 00:11:42,000  
we haven't even thought of but we need

159  
00:11:45,750 --> 00:11:43,600  
you to help

160  
00:11:47,910 --> 00:11:45,760  
it could be any of you to be part of

161  
00:11:48,949 --> 00:11:47,920  
this and i'm so excited to be here today

162  
00:11:56,069 --> 00:11:48,959  
with all of you

163  
00:12:00,230 --> 00:11:56,079

lori take it away

164

00:12:02,310 --> 00:12:00,240

right thank you thomas and now

165

00:12:04,310 --> 00:12:02,320

what we've been waiting for it is now my

166

00:12:07,670 --> 00:12:04,320

great honor

167

00:12:08,949 --> 00:12:07,680

to invite the winner of the mars rover

168

00:12:12,069 --> 00:12:08,959

naming contest

169

00:12:15,190 --> 00:12:12,079

to come to the stage please join me

170

00:12:16,389 --> 00:12:15,200

in a big round of applause for your

171

00:12:18,870 --> 00:12:16,399

classmate

172

00:12:19,990 --> 00:12:18,880

who submitted perseverance as the

173

00:12:23,930 --> 00:12:20,000

winning name

174

00:12:36,829 --> 00:12:23,940

come on alex mather come to the stage

175

00:12:36,839 --> 00:12:42,069

guessing

176

00:12:50,230 --> 00:12:46,949

all right who wants to hear the essay

177

00:12:52,550 --> 00:12:50,240

yeah all right so

178

00:12:55,350 --> 00:12:52,560

your mic's up right yeah all right alex

179

00:12:57,270 --> 00:12:55,360

do you want to read us your essay i do

180

00:13:01,190 --> 00:12:57,280

if i can unfold this paper

181

00:13:08,230 --> 00:13:05,829

curiosity insight spirit

182

00:13:10,310 --> 00:13:08,240

if you think about it all of these names

183

00:13:11,990 --> 00:13:10,320

of past mars rovers are qualities we

184

00:13:14,470 --> 00:13:12,000

possess as humans

185

00:13:15,990 --> 00:13:14,480

we're always curious and seek

186

00:13:17,590 --> 00:13:16,000

opportunity

187

00:13:21,110 --> 00:13:17,600

we have the spirit and insight to

188

00:13:23,110 --> 00:13:21,120

explore the moon mars and beyond

189

00:13:24,230 --> 00:13:23,120

but if rovers are to be the qualities of

190

00:13:26,310 --> 00:13:24,240

us as a race

191

00:13:27,990 --> 00:13:26,320

we missed the most important thing

192

00:13:30,069 --> 00:13:28,000

perseverance

193

00:13:32,710 --> 00:13:30,079

we as humans evolved as creatures who

194

00:13:35,190 --> 00:13:32,720

could learn to adapt to any situation

195

00:13:36,470 --> 00:13:35,200

no matter how harsh we are species of

196

00:13:38,150 --> 00:13:36,480

explorers

197

00:13:39,910 --> 00:13:38,160

and we will meet many setbacks on the

198

00:13:43,750 --> 00:13:39,920

way to mars however

199

00:13:46,230 --> 00:13:43,760

we can persevere we not as a nation

200

00:13:47,670 --> 00:13:46,240

but as humans will not give up the human

201  
00:13:49,540 --> 00:13:47,680  
grace will always persevere into the

202  
00:13:59,750 --> 00:13:49,550  
future

203  
00:14:04,310 --> 00:14:01,590  
we're going to have a moment now of a

204  
00:14:07,350 --> 00:14:04,320  
little q a with alex

205  
00:14:09,990 --> 00:14:07,360  
so congratulations again alex

206  
00:14:11,430 --> 00:14:10,000  
thank you this is a really tremendous

207  
00:14:13,350 --> 00:14:11,440  
achievement

208  
00:14:15,750 --> 00:14:13,360  
i enjoyed meeting you i got to be one of

209  
00:14:17,750 --> 00:14:15,760  
the four panelists that did the

210  
00:14:19,430 --> 00:14:17,760  
interviews with the nine finalists and

211  
00:14:20,790 --> 00:14:19,440  
so it's great to finally get to meet you

212  
00:14:22,629 --> 00:14:20,800  
in person

213  
00:14:24,389 --> 00:14:22,639

and when we had our interview we talked

214

00:14:26,150 --> 00:14:24,399

about a lot of different things but

215

00:14:28,069 --> 00:14:26,160

maybe you could share with the group

216

00:14:31,829 --> 00:14:28,079

here today the folks in the room and the

217

00:14:35,269 --> 00:14:31,839

folks that are watching us online

218

00:14:38,389 --> 00:14:35,279

why it is that you love space so much

219

00:14:41,750 --> 00:14:38,399

that's actually really easy when

220

00:14:42,790 --> 00:14:41,760

i turned 11 my parents decided to send

221

00:14:46,389 --> 00:14:42,800

me to space camp

222

00:14:49,110 --> 00:14:46,399

as a birthday present and

223

00:14:49,430 --> 00:14:49,120

originally i didn't know what to expect

224

00:14:50,629 --> 00:14:49,440

but

225

00:14:52,949 --> 00:14:50,639

i don't know if any of you have ever

226

00:14:54,069 --> 00:14:52,959

been to space camp but as you're driving

227

00:14:56,550 --> 00:14:54,079

up to the campus

228

00:14:57,670 --> 00:14:56,560

there's this building that is blocking

229

00:15:00,710 --> 00:14:57,680

the view of the

230

00:15:04,069 --> 00:15:00,720

model of the saturn v that's

231

00:15:07,030 --> 00:15:04,079

just on campus and as you drive up to

232

00:15:08,310 --> 00:15:07,040

the campus you see the capsule of the

233

00:15:11,350 --> 00:15:08,320

saturn v

234

00:15:12,710 --> 00:15:11,360

slowly rise above the building and 11

235

00:15:14,200 --> 00:15:12,720

year old me saw that

236

00:15:16,389 --> 00:15:14,210

and lost his mind

237

00:15:17,750 --> 00:15:16,399

[Laughter]

238

00:15:19,189 --> 00:15:17,760

i immediately knew that space is

239

00:15:20,470 --> 00:15:19,199

something i was doing for the rest of my

240

00:15:22,550 --> 00:15:20,480

life

241

00:15:23,910 --> 00:15:22,560

that is just a great story i love that

242

00:15:25,990 --> 00:15:23,920

it's inspirational

243

00:15:28,150 --> 00:15:26,000

and a lot of us at nasa were in your

244

00:15:31,430 --> 00:15:28,160

shoes when we were your age

245

00:15:33,829 --> 00:15:31,440

and were inspired uh to go on and

246

00:15:35,189 --> 00:15:33,839

become engineers and scientists and

247

00:15:38,310 --> 00:15:35,199

explorers

248

00:15:39,590 --> 00:15:38,320

and uh it took for all of us an enormous

249

00:15:41,509 --> 00:15:39,600

amount of perseverance

250

00:15:42,949 --> 00:15:41,519

to get to where we are today so we

251  
00:15:45,189 --> 00:15:42,959  
really appreciate the name that you've

252  
00:15:47,829 --> 00:15:45,199  
suggested for our next mars rover

253  
00:15:48,629 --> 00:15:47,839  
so just one more question can you share

254  
00:15:51,590 --> 00:15:48,639  
with us

255  
00:15:53,030 --> 00:15:51,600  
what your goals are as a young person

256  
00:15:55,189 --> 00:15:53,040  
who wants to make your own mark in

257  
00:15:57,189 --> 00:15:55,199  
exploration

258  
00:15:58,310 --> 00:15:57,199  
so let's start a little bit more

259  
00:15:59,510 --> 00:15:58,320  
short-term goals

260  
00:16:02,310 --> 00:15:59,520  
high school diploma

261  
00:16:04,470 --> 00:16:02,320  
[Laughter]

262  
00:16:06,310 --> 00:16:04,480  
get that first get those two years of

263  
00:16:09,509 --> 00:16:06,320

language

264

00:16:12,710 --> 00:16:09,519

do those and

265

00:16:15,829 --> 00:16:12,720

after that i want to go to college

266

00:16:16,710 --> 00:16:15,839

get a degree in some form of engineering

267

00:16:18,790 --> 00:16:16,720

or science

268

00:16:20,150 --> 00:16:18,800

space engineering and astronautics sound

269

00:16:23,030 --> 00:16:20,160

good right now

270

00:16:24,790 --> 00:16:23,040

and then after that go work at nasa as

271

00:16:27,590 --> 00:16:24,800

in engineer

272

00:16:29,990 --> 00:16:27,600

perfect sounds like a great plan thanks

273

00:16:34,230 --> 00:16:31,990

i think they support that plan all right

274

00:16:37,910 --> 00:16:34,240

alex now do you have any questions

275

00:16:39,829 --> 00:16:37,920

for uh dr z or for lori i do

276

00:16:41,269 --> 00:16:39,839

so could you tell me more about the

277

00:16:42,949 --> 00:16:41,279

arguments program

278

00:16:44,310 --> 00:16:42,959

so we're really excited about artemis

279

00:16:45,590 --> 00:16:44,320

you know we've been

280

00:16:47,590 --> 00:16:45,600

in low earth orbit with the

281

00:16:49,350 --> 00:16:47,600

international space station

282

00:16:51,430 --> 00:16:49,360

the whole duration of your lives if

283

00:16:53,350 --> 00:16:51,440

you're students here for over 18 years

284

00:16:54,550 --> 00:16:53,360

there's always been americans up there

285

00:16:55,350 --> 00:16:54,560

together with their international

286

00:16:58,790 --> 00:16:55,360

partners

287

00:17:02,069 --> 00:16:58,800

and it's time to go beyond we want to go

288

00:17:03,189 --> 00:17:02,079

to the moon with that next generation of

289

00:17:05,590 --> 00:17:03,199

explorers and

290

00:17:07,909 --> 00:17:05,600

new technologies go to the moon learn

291

00:17:09,029 --> 00:17:07,919

how to stay there sustainably not to

292

00:17:11,590 --> 00:17:09,039

stay there forever

293

00:17:13,590 --> 00:17:11,600

but to learn how to go to mars because

294

00:17:16,150 --> 00:17:13,600

even though we're sending a rover

295

00:17:17,429 --> 00:17:16,160

this year to mars we really want to send

296

00:17:19,829 --> 00:17:17,439

people and bring them back

297

00:17:22,230 --> 00:17:19,839

safely so that is the ultimate goal of

298

00:17:26,470 --> 00:17:22,240

the artemis generation

299

00:17:28,630 --> 00:17:26,480

all right and in 10 years

300

00:17:31,510 --> 00:17:28,640

most of the people in this room will be

301  
00:17:32,950 --> 00:17:31,520  
out of college and looking for a job

302  
00:17:35,190 --> 00:17:32,960  
what are going to be the cool nasa

303  
00:17:36,390 --> 00:17:35,200  
missions i love that question so let me

304  
00:17:37,350 --> 00:17:36,400  
tell you about some of the cool things

305  
00:17:38,870 --> 00:17:37,360  
we'll be doing

306  
00:17:40,950 --> 00:17:38,880  
in about 10 years when you all get out

307  
00:17:41,590 --> 00:17:40,960  
of college number one we talked about

308  
00:17:44,150 --> 00:17:41,600  
the mars

309  
00:17:46,230 --> 00:17:44,160  
2020 the perseverance rover is going to

310  
00:17:48,950 --> 00:17:46,240  
be collecting samples it's the first

311  
00:17:49,590 --> 00:17:48,960  
leg of the first round trip from earth

312  
00:17:52,470 --> 00:17:49,600  
to mars

313  
00:17:53,830 --> 00:17:52,480

and back to bring those samples back to

314

00:17:56,470 --> 00:17:53,840

earth and so we're hoping

315

00:17:58,789 --> 00:17:56,480

in the 2030s that we will be bringing

316

00:18:00,950 --> 00:17:58,799

those samples back here to earth

317

00:18:02,470 --> 00:18:00,960

that'll be incredibly cool we also have

318

00:18:04,870 --> 00:18:02,480

a mission right now that we're

319

00:18:06,710 --> 00:18:04,880

beginning work on called dragonfly which

320

00:18:10,390 --> 00:18:06,720

is going to be a mission to send an

321

00:18:10,950 --> 00:18:10,400

octocopter drone to the surface of titan

322

00:18:14,230 --> 00:18:10,960

which is a

323

00:18:16,150 --> 00:18:14,240

moon of saturn really cool place and

324

00:18:19,270 --> 00:18:16,160

that one's supposed to launch in 26 and

325

00:18:20,230 --> 00:18:19,280

it's supposed to land on titan in 2034

326

00:18:22,150 --> 00:18:20,240

and so that's going to do some

327

00:18:23,029 --> 00:18:22,160

incredible science on the surface of

328

00:18:24,549 --> 00:18:23,039

titan

329

00:18:25,990 --> 00:18:24,559

going even further than that we're

330

00:18:27,270 --> 00:18:26,000

thinking about missions that could

331

00:18:29,270 --> 00:18:27,280

potentially go

332

00:18:31,430 --> 00:18:29,280

to uranus or neptune there's a really

333

00:18:33,510 --> 00:18:31,440

important opportunity at the end

334

00:18:34,870 --> 00:18:33,520

of the 2020s where all of the planets

335

00:18:37,270 --> 00:18:34,880

line up just right that we could

336

00:18:39,590 --> 00:18:37,280

actually go visit uranus and neptune

337

00:18:40,950 --> 00:18:39,600

at the same time so that's a really cool

338

00:18:42,789 --> 00:18:40,960

thing that we're looking at

339

00:18:44,950 --> 00:18:42,799

we're thinking about missions to go land

340

00:18:46,230 --> 00:18:44,960

on the surface of other icy moons like

341

00:18:48,470 --> 00:18:46,240

the moon of europa

342

00:18:49,909 --> 00:18:48,480

that's around jupiter that's got ice and

343

00:18:51,669 --> 00:18:49,919

we think a liquid ocean beneath we'd

344

00:18:53,590 --> 00:18:51,679

like to land on the surface there

345

00:18:55,110 --> 00:18:53,600

or enceladus another moon of saturn

346

00:18:55,750 --> 00:18:55,120

where we think there might be liquid

347

00:18:59,430 --> 00:18:55,760

oceans

348

00:19:01,590 --> 00:18:59,440

and maybe even potentially

349

00:19:03,590 --> 00:19:01,600

signs of life inside those liquid oceans

350

00:19:05,430 --> 00:19:03,600

so there are some incredibly

351

00:19:07,270 --> 00:19:05,440

amazing opportunities that are coming in

352

00:19:08,950 --> 00:19:07,280

the 2030s

353

00:19:10,950 --> 00:19:08,960

so we look for all of you guys to join

354

00:19:12,870 --> 00:19:10,960

us at nasa at that time i was just gonna

355

00:19:14,950 --> 00:19:12,880

say that and guess what nasa needs you

356

00:19:16,150 --> 00:19:14,960

and nasa needs all of you and nasa needs

357

00:19:19,430 --> 00:19:16,160

all of you

358

00:19:21,190 --> 00:19:19,440

um it's it's very it's quite exciting we

359

00:19:23,990 --> 00:19:21,200

are all exploring this universe it's

360

00:19:26,230 --> 00:19:24,000

amazing all right so next we have a very

361

00:19:27,669 --> 00:19:26,240

special guest uh someone from your

362

00:19:29,990 --> 00:19:27,679

school district

363

00:19:31,750 --> 00:19:30,000

so uh you know lake braddock i'd love

364

00:19:35,590 --> 00:19:31,760

for you all to give a warm welcome

365

00:19:39,190 --> 00:19:35,600

to superintendent dr scott brabrand

366

00:19:45,430 --> 00:19:39,200

thank you thank you

367

00:19:52,230 --> 00:19:45,440

this is a great day for alex let's give

368

00:19:54,870 --> 00:19:52,240

alex a round of applause

369

00:19:57,190 --> 00:19:54,880

this is a great day for lake braddock

370

00:20:04,549 --> 00:19:57,200

secondary school give all of yourselves

371

00:20:08,789 --> 00:20:06,549

this is a great day too for fairfax

372

00:20:09,669 --> 00:20:08,799

county public schools it's a great day

373

00:20:12,070 --> 00:20:09,679

for nasa

374

00:20:13,190 --> 00:20:12,080

it's a great day for the united states

375

00:20:15,750 --> 00:20:13,200

of america

376

00:20:16,390 --> 00:20:15,760

we have always been leaders in space and

377

00:20:18,710 --> 00:20:16,400

the next

378

00:20:21,669 --> 00:20:18,720

generation the artemis generation is

379

00:20:23,990 --> 00:20:21,679

right here happening at lake braddock

380

00:20:25,110 --> 00:20:24,000

secondary you are the next generation

381

00:20:32,870 --> 00:20:25,120

for space

382

00:20:36,470 --> 00:20:35,350

i want to just acknowledge a few special

383

00:20:39,430 --> 00:20:36,480

guests that are with

384

00:20:41,909 --> 00:20:39,440

us today what you all have done alex

385

00:20:44,149 --> 00:20:41,919

it's you but it's also this school and

386

00:20:45,110 --> 00:20:44,159

all of your peers creating an atmosphere

387

00:20:48,950 --> 00:20:45,120

to celebrate

388

00:20:50,470 --> 00:20:48,960

steam science technology engineering

389

00:20:52,710 --> 00:20:50,480

arts mathematics

390

00:20:54,789 --> 00:20:52,720

that makes the imagination to come up

391

00:20:55,750 --> 00:20:54,799

with the name for the next mars rover

392

00:20:57,270 --> 00:20:55,760

possible

393

00:21:00,230 --> 00:20:57,280

i have three school board members with

394

00:21:03,590 --> 00:21:00,240

me megan mclaughlin please stand

395

00:21:07,590 --> 00:21:03,600

laura jane cohen and

396

00:21:13,830 --> 00:21:09,669

we also have our region assistant

397

00:21:17,270 --> 00:21:15,350

our assistant superintendent for

398

00:21:18,870 --> 00:21:17,280

information technology marybeth loop

399

00:21:22,149 --> 00:21:18,880

class

400

00:21:22,630 --> 00:21:22,159

and also i know he's here your principal

401  
00:21:34,230 --> 00:21:22,640  
dr

402  
00:21:37,750 --> 00:21:34,240  
i also know i want every one of you

403  
00:21:38,310 --> 00:21:37,760  
because i learned that science olympiad

404  
00:21:42,470 --> 00:21:38,320  
this

405  
00:21:43,510 --> 00:21:42,480  
at lake braddock science olympiad at the

406  
00:21:46,070 --> 00:21:43,520  
middle school

407  
00:21:46,870 --> 00:21:46,080  
was first and third at the regional

408  
00:21:50,390 --> 00:21:46,880  
competition

409  
00:21:52,870 --> 00:21:50,400  
team fusion and team fission

410  
00:21:55,830 --> 00:21:52,880  
please stand if you were on either of

411  
00:21:59,270 --> 00:21:55,840  
those two teams

412  
00:22:01,110 --> 00:21:59,280  
team fusion and team vision stand and be

413  
00:22:04,360 --> 00:22:01,120

recognized

414

00:22:08,710 --> 00:22:04,370

stay standing stay standing

415

00:22:12,470 --> 00:22:10,710

where is your sponsor by the way the

416

00:22:15,190 --> 00:22:12,480

sponsor what's your what

417

00:22:16,210 --> 00:22:15,200

wave and be recognized give her a big

418

00:22:21,590 --> 00:22:16,220

round of applause

419

00:22:24,310 --> 00:22:21,600

[Applause]

420

00:22:24,710 --> 00:22:24,320

just like alex said about going to space

421

00:22:27,350 --> 00:22:24,720

camp

422

00:22:28,470 --> 00:22:27,360

plants the seed your teachers here at

423

00:22:31,990 --> 00:22:28,480

lake braddock

424

00:22:34,230 --> 00:22:32,000

this school is planting the seed in you

425

00:22:36,470 --> 00:22:34,240

right planting the seed in you to do

426  
00:22:37,110 --> 00:22:36,480  
whatever you want to dream whatever you

427  
00:22:42,950 --> 00:22:37,120  
want

428  
00:22:45,430 --> 00:22:42,960  
as you go out and i think mars is one of

429  
00:22:46,789 --> 00:22:45,440  
those you can see in the evening sky

430  
00:22:48,789 --> 00:22:46,799  
it's one of the planets i think it's

431  
00:22:49,190 --> 00:22:48,799  
mars and venus that's about as good as i

432  
00:22:52,390 --> 00:22:49,200  
can

433  
00:22:54,310 --> 00:22:52,400  
remember from high school days that now

434  
00:22:56,310 --> 00:22:54,320  
when you look out in the sky

435  
00:22:57,669 --> 00:22:56,320  
you'll not just think of mars you will

436  
00:23:01,350 --> 00:22:57,679  
think of lake

437  
00:23:04,390 --> 00:23:01,360  
braddock secondary school and forever

438  
00:23:07,510 --> 00:23:04,400

now this school will have

439

00:23:10,070 --> 00:23:07,520

a role will have a lasting presence

440

00:23:11,830 --> 00:23:10,080

on another planet in our solar system so

441

00:23:12,710 --> 00:23:11,840

it is a great day for lake braddock

442

00:23:14,630 --> 00:23:12,720

secondary school

443

00:23:16,710 --> 00:23:14,640

thank you again nasa for all you've done

444

00:23:19,029 --> 00:23:16,720

and alex congratulations again

445

00:23:29,270 --> 00:23:19,039

on a job well done we're proud of you

446

00:23:35,110 --> 00:23:32,630

all right uh we have

447

00:23:36,470 --> 00:23:35,120

uh all kinds of vips here today i'm also

448

00:23:37,270 --> 00:23:36,480

told we have a representative from

449

00:23:39,510 --> 00:23:37,280

senator

450

00:23:42,630 --> 00:23:39,520

mark warner's office beau matriar are

451

00:23:45,590 --> 00:23:42,640

you here can you stand up

452

00:23:47,669 --> 00:23:45,600

thank you so much for attending and we

453

00:23:50,710 --> 00:23:47,679

have a very special surprise

454

00:23:52,470 --> 00:23:50,720

uh virginia senator mark warner has

455

00:23:55,830 --> 00:23:52,480

provided a pre-recorded message so we're

456

00:23:59,029 --> 00:23:58,230

hi there i'm virginia senator mark

457

00:24:00,950 --> 00:23:59,039

warner

458

00:24:02,789 --> 00:24:00,960

and it's an honor to be able to say a

459

00:24:05,990 --> 00:24:02,799

few words to you all today

460

00:24:09,110 --> 00:24:06,000

first off i want to congratulate alex

461

00:24:11,510 --> 00:24:09,120

on being chosen to name the next rover

462

00:24:12,710 --> 00:24:11,520

that will get to explore the surface of

463

00:24:16,070 --> 00:24:12,720

mars

464

00:24:18,789 --> 00:24:16,080

as you all probably know alex was chosen

465

00:24:20,230 --> 00:24:18,799

from more than 28 000 students who

466

00:24:21,909 --> 00:24:20,240

submitted essays

467

00:24:23,830 --> 00:24:21,919

and threw their hat in the ring to get

468

00:24:27,190 --> 00:24:23,840

the name this rover

469

00:24:29,669 --> 00:24:27,200

upon landing in mars perseverance

470

00:24:30,549 --> 00:24:29,679

will help nasa scientists answer key

471

00:24:32,789 --> 00:24:30,559

questions

472

00:24:33,750 --> 00:24:32,799

about the conditions on mars and the

473

00:24:37,029 --> 00:24:33,760

potential

474

00:24:39,029 --> 00:24:37,039

for life on that planet pretty cool

475

00:24:41,830 --> 00:24:39,039

i think this is a great achievement that

476

00:24:44,149 --> 00:24:41,840

speaks both to alex's potential

477

00:24:46,310 --> 00:24:44,159

and the great quality of virginia's

478

00:24:46,950 --> 00:24:46,320

public school teachers i hope this

479

00:24:49,190 --> 00:24:46,960

experience

480

00:24:50,789 --> 00:24:49,200

will inspire everyone to learn more

481

00:24:53,590 --> 00:24:50,799

about nasa's mission

482

00:24:54,710 --> 00:24:53,600

and to work hard in school because as

483

00:24:56,710 --> 00:24:54,720

our world changes

484

00:24:57,990 --> 00:24:56,720

we're going to need more young people

485

00:25:00,630 --> 00:24:58,000

who are great at science

486

00:25:01,029 --> 00:25:00,640

technology math and engineering to help

487

00:25:04,070 --> 00:25:01,039

fill

488

00:25:05,029 --> 00:25:04,080

the jobs of the future in fact if you

489

00:25:08,149 --> 00:25:05,039

work hard

490

00:25:08,870 --> 00:25:08,159

i'm confident that one day you'll get to

491

00:25:11,430 --> 00:25:08,880

not only

492

00:25:11,909 --> 00:25:11,440

name the rover but design it and help

493

00:25:15,909 --> 00:25:11,919

ensure

494

00:25:18,789 --> 00:25:15,919

it's safe landing on mars and beyond

495

00:25:20,070 --> 00:25:18,799

once again congratulations to alex and

496

00:25:22,310 --> 00:25:20,080

everybody in the school

497

00:25:28,310 --> 00:25:22,320

on this awesome achievement keep

498

00:25:29,750 --> 00:25:28,320

reaching for the stars

499

00:25:31,750 --> 00:25:29,760

all right and now we're going to have a

500

00:25:33,510 --> 00:25:31,760

bit of a shout out moment so at the

501  
00:25:35,350 --> 00:25:33,520  
beginning of this contest nasa did an

502  
00:25:37,029 --> 00:25:35,360  
all-call for organizations to help run

503  
00:25:38,710 --> 00:25:37,039  
the name the rover contest

504  
00:25:40,390 --> 00:25:38,720  
two organizations stepped up and

505  
00:25:42,390 --> 00:25:40,400  
volunteered their time their effort

506  
00:25:43,269 --> 00:25:42,400  
their expertise to help them make all of

507  
00:25:45,029 --> 00:25:43,279  
this happen

508  
00:25:47,430 --> 00:25:45,039  
those organizations are battelle

509  
00:25:49,669 --> 00:25:47,440  
education and future engineers

510  
00:25:51,350 --> 00:25:49,679  
battelle does so many things they've

511  
00:25:52,789 --> 00:25:51,360  
helped from recruiting judges to

512  
00:25:54,789 --> 00:25:52,799  
engaging teachers

513  
00:25:56,070 --> 00:25:54,799

they've been there every step of the way

514

00:25:57,510 --> 00:25:56,080

future engineers is my

515

00:25:59,750 --> 00:25:57,520

organization we're an education

516

00:26:01,430 --> 00:25:59,760

technology company that specializes in

517

00:26:03,350 --> 00:26:01,440

student contests and challenges

518

00:26:05,750 --> 00:26:03,360

and uh we really played a role in the

519

00:26:09,029 --> 00:26:05,760

online portal to manage all of those 28

520

00:26:10,149 --> 00:26:09,039

000 entries but we also have some pretty

521

00:26:12,070 --> 00:26:10,159

awesome prizes

522

00:26:13,510 --> 00:26:12,080

associated with this challenge of course

523

00:26:17,110 --> 00:26:13,520

the ultimate prize

524

00:26:20,390 --> 00:26:17,120

is naming the next mars rover but

525

00:26:21,190 --> 00:26:20,400

um i'm excited to say that alex and his

526  
00:26:23,590 --> 00:26:21,200  
family

527  
00:26:24,950 --> 00:26:23,600  
will also be sent all the way down to

528  
00:26:27,909 --> 00:26:24,960  
cape canaveral florida

529  
00:26:29,669 --> 00:26:27,919  
to watch that rover launch in july and

530  
00:26:32,310 --> 00:26:29,679  
providing that trip

531  
00:26:33,590 --> 00:26:32,320  
we have amazon web services here as the

532  
00:26:35,909 --> 00:26:33,600  
prize provider

533  
00:26:37,990 --> 00:26:35,919  
and i'm excited to have jamie baker from

534  
00:26:40,070 --> 00:26:38,000  
amazon come on stage

535  
00:26:54,250 --> 00:26:40,080  
alex why don't you come over alex's

536  
00:27:02,230 --> 00:26:59,149  
[Applause]

537  
00:27:05,750 --> 00:27:02,240  
congratulations you guys excited

538  
00:27:06,789 --> 00:27:05,760

definitely yeah thank you so much jamie

539

00:27:09,750 --> 00:27:06,799

we appreciate it

540

00:27:10,950 --> 00:27:09,760

have you guys been to a lunch before not

541

00:27:13,909 --> 00:27:10,960

you haven't been to watch

542

00:27:14,870 --> 00:27:13,919

i'm from uh cape canaveral originally so

543

00:27:16,870 --> 00:27:14,880

you're gonna love it

544

00:27:18,070 --> 00:27:16,880

you're going to love it so we're going

545

00:27:21,110 --> 00:27:18,080

to have it go ahead and have you guys

546

00:27:24,389 --> 00:27:21,120

come back off stage

547

00:27:27,190 --> 00:27:24,399

how are you feeling pretty good

548

00:27:28,950 --> 00:27:27,200

did you get any sleep last night oh he

549

00:27:30,149 --> 00:27:28,960

got fun he found out last night by the

550

00:27:33,590 --> 00:27:30,159

way

551  
00:27:39,669 --> 00:27:33,600  
so i tried

552  
00:27:44,149 --> 00:27:41,830  
all right um there's an entire assembly

553  
00:27:46,149 --> 00:27:44,159  
right now and a live tv show

554  
00:27:48,070 --> 00:27:46,159  
because of you and your name feels good

555  
00:27:50,149 --> 00:27:48,080  
right definitely

556  
00:27:51,510 --> 00:27:50,159  
you're changing space history and we're

557  
00:27:53,909 --> 00:27:51,520  
so proud to have you here

558  
00:27:55,669 --> 00:27:53,919  
and you know i mentioned prizes before

559  
00:27:57,269 --> 00:27:55,679  
and there's one more prize that we want

560  
00:27:58,710 --> 00:27:57,279  
to present here on stage and it's going

561  
00:28:01,669 --> 00:27:58,720  
to be presented by a

562  
00:28:02,149 --> 00:28:01,679  
very special guest this guest has had a

563  
00:28:04,149 --> 00:28:02,159

role

564

00:28:05,909 --> 00:28:04,159

in inspiring students all across the

565

00:28:08,070 --> 00:28:05,919

country teaching them about

566

00:28:09,590 --> 00:28:08,080

mars about space exploration and about

567

00:28:16,470 --> 00:28:09,600

the rover

568

00:28:25,669 --> 00:28:16,480

and its name is rovy

569

00:28:34,149 --> 00:28:30,389

come on don't be shy don't be shy

570

00:28:35,510 --> 00:28:34,159

hello um are you gonna come board

571

00:28:37,190 --> 00:28:35,520

somebody should go ahead and grab the

572

00:28:40,549 --> 00:28:37,200

prize that robbie's giving you

573

00:28:42,470 --> 00:28:40,559

all right thank you roby

574

00:28:44,149 --> 00:28:42,480

so the fun fact about this prize is this

575

00:28:47,269 --> 00:28:44,159

is actually the semifinalist prize

576

00:28:48,389 --> 00:28:47,279

packet so in this contest there were 155

577

00:28:51,510 --> 00:28:48,399

semi-finalists

578

00:28:53,269 --> 00:28:51,520

nine finalists but there were 28 000

579

00:28:54,789 --> 00:28:53,279

entries and those entries were

580

00:28:56,789 --> 00:28:54,799

phenomenal i think you know

581

00:28:57,990 --> 00:28:56,799

best of all that the competition was was

582

00:29:00,549 --> 00:28:58,000

fierce oh yeah it was

583

00:29:01,830 --> 00:29:00,559

tough and so we just want to take a

584

00:29:04,149 --> 00:29:01,840

moment to acknowledge

585

00:29:05,590 --> 00:29:04,159

every single student that submitted an

586

00:29:08,710 --> 00:29:05,600

entry in this contest

587

00:29:10,950 --> 00:29:08,720

your enthusiasm for space is phenomenal

588

00:29:14,149 --> 00:29:10,960

and we just encourage you to keep going

589

00:29:17,110 --> 00:29:14,159

keep going that that passion has a home

590

00:29:17,669 --> 00:29:17,120

in this family of space exploration so

591

00:29:19,669 --> 00:29:17,679

um

592

00:29:24,830 --> 00:29:19,679

come on roby don't be shy let's go to

593

00:29:24,840 --> 00:29:28,740

high

594

00:29:36,710 --> 00:29:34,740

[Applause]

595

00:29:42,310 --> 00:29:36,720

[Music]

596

00:29:42,320 --> 00:29:44,870

good job

597

00:29:51,029 --> 00:29:47,350

[Music]

598

00:29:55,269 --> 00:29:51,039

all right so one more time let's hear it

599

00:29:57,830 --> 00:29:55,279

for perseverance

600

00:30:00,230 --> 00:29:57,840

all right now we're going to go back to

601  
00:30:03,590 --> 00:30:00,240  
you jpl

602  
00:30:06,830 --> 00:30:03,600  
all right thanks deanne

603  
00:30:09,269 --> 00:30:06,840  
what does everyone here think of the new

604  
00:30:12,389 --> 00:30:09,279  
name

605  
00:30:15,909 --> 00:30:12,399  
i can feel your energy right now

606  
00:30:22,470 --> 00:30:19,190  
and with us here is jennifer

607  
00:30:24,710 --> 00:30:22,480  
trosper she is the mission manager

608  
00:30:26,149 --> 00:30:24,720  
for perseverance and she's going to tell

609  
00:30:29,029 --> 00:30:26,159  
us a little bit more about

610  
00:30:30,230 --> 00:30:29,039  
where the name will go on the rover

611  
00:30:32,310 --> 00:30:30,240  
thanks raquel

612  
00:30:34,630 --> 00:30:32,320  
well it is awesome to be here with the

613  
00:30:36,950 --> 00:30:34,640

mars 2020 team

614

00:30:38,950 --> 00:30:36,960

for the unveiling of the name of the

615

00:30:48,830 --> 00:30:38,960

rover how many of you think that is an

616

00:31:01,350 --> 00:30:51,510

and how many of you

617

00:31:07,029 --> 00:31:04,789

all right so now finally

618

00:31:08,870 --> 00:31:07,039

now that everybody knows the name i can

619

00:31:11,509 --> 00:31:08,880

open this package

620

00:31:12,310 --> 00:31:11,519

here it we in fact this is the rover

621

00:31:14,549 --> 00:31:12,320

name plate

622

00:31:16,389 --> 00:31:14,559

it's a flight spare it's not the actual

623

00:31:19,750 --> 00:31:16,399

one that's going to go on the rover

624

00:31:20,310 --> 00:31:19,760

but it's just like it the rover name

625

00:31:23,590 --> 00:31:20,320

plate

626  
00:31:25,269 --> 00:31:23,600  
is we made uh several because even we

627  
00:31:27,669 --> 00:31:25,279  
didn't know what the rover's name

628  
00:31:29,830 --> 00:31:27,679  
was going to be so this is the rover

629  
00:31:41,350 --> 00:31:29,840  
name plate with perseverance

630  
00:31:48,230 --> 00:31:44,789  
i really like the font selection it's

631  
00:31:50,389 --> 00:31:48,240  
very spacey so this is actually it

632  
00:31:51,750 --> 00:31:50,399  
functions on the rover's robotic arm as

633  
00:31:53,750 --> 00:31:51,760  
a rock guard

634  
00:31:55,190 --> 00:31:53,760  
my robotic arm people are sitting here

635  
00:31:56,710 --> 00:31:55,200  
saying so when the rubber drives you

636  
00:31:58,230 --> 00:31:56,720  
want to make sure that the cables that

637  
00:32:00,470 --> 00:31:58,240  
are underneath this

638  
00:32:02,789 --> 00:32:00,480

don't get damaged and you can see the

639

00:32:05,830 --> 00:32:02,799

rover's robotic arm in this picture

640

00:32:06,789 --> 00:32:05,840

and you can see the name plate on the

641

00:32:09,110 --> 00:32:06,799

arm

642

00:32:11,509 --> 00:32:09,120

so now i'm going to put this here weighs

643

00:32:12,549 --> 00:32:11,519

about 100 grams and i think we have some

644

00:32:15,750 --> 00:32:12,559

video

645

00:32:17,669 --> 00:32:15,760

of the nameplate being made you can see

646

00:32:19,990 --> 00:32:17,679

there it is it's in a shop that was

647

00:32:22,549 --> 00:32:20,000

local to los angeles

648

00:32:24,310 --> 00:32:22,559

one of the things that they did is they

649

00:32:25,029 --> 00:32:24,320

covered this with the thermal black

650

00:32:28,149 --> 00:32:25,039

anodized

651  
00:32:29,909 --> 00:32:28,159  
paint and then they etched in laser

652  
00:32:31,430 --> 00:32:29,919  
the name perseverance and you'll see

653  
00:32:33,509 --> 00:32:31,440  
that in the video

654  
00:32:35,750 --> 00:32:33,519  
now i love the name perseverance for the

655  
00:32:37,350 --> 00:32:35,760  
rover it's awesome for the rover this

656  
00:32:38,310 --> 00:32:37,360  
rover is going to have challenges those

657  
00:32:40,070 --> 00:32:38,320  
of us who've

658  
00:32:41,750 --> 00:32:40,080  
taken rovers to mars before know that

659  
00:32:41,990 --> 00:32:41,760  
mars always throws different things at

660  
00:32:45,990 --> 00:32:42,000  
you

661  
00:32:48,230 --> 00:32:46,000  
persists and perseveres

662  
00:32:50,470 --> 00:32:48,240  
and so one of the things i also really

663  
00:32:53,190 --> 00:32:50,480

like about this name though

664

00:32:54,230 --> 00:32:53,200

is that perseverance is a characteristic

665

00:32:56,950 --> 00:32:54,240

of the team

666

00:32:58,149 --> 00:32:56,960

behind the rover all of you people in

667

00:33:00,470 --> 00:32:58,159

this room

668

00:33:03,110 --> 00:33:00,480

all of the people in the overflow room

669

00:33:06,149 --> 00:33:03,120

all of the people across this country

670

00:33:09,430 --> 00:33:06,159

who spent the last nearly decade

671

00:33:12,549 --> 00:33:09,440

getting us to having a rover in florida

672

00:33:14,950 --> 00:33:12,559

right now in 2020.

673

00:33:16,630 --> 00:33:14,960

you guys have persevered and now i need

674

00:33:19,509 --> 00:33:16,640

you to help me with uh

675

00:33:21,029 --> 00:33:19,519

with something so over 3 000 people and

676

00:33:23,350 --> 00:33:21,039

perseverance means

677

00:33:24,389 --> 00:33:23,360

overcoming challenges overcoming

678

00:33:26,789 --> 00:33:24,399

obstacles

679

00:33:28,389 --> 00:33:26,799

and moving forward to get to your

680

00:33:31,750 --> 00:33:28,399

mission success

681

00:33:33,909 --> 00:33:31,760

so over 3 000 people how many problems

682

00:33:35,190 --> 00:33:33,919

and challenges have you guys had to

683

00:33:37,669 --> 00:33:35,200

overcome

684

00:33:38,470 --> 00:33:37,679

in the last decade to get us to where we

685

00:33:40,389 --> 00:33:38,480

are today

686

00:33:42,789 --> 00:33:40,399

numbers i need numbers like it i know

687

00:33:45,750 --> 00:33:42,799

it's more than a hundred thousand

688

00:33:49,190 --> 00:33:45,760

a million i hear a million any other

689

00:33:52,230 --> 00:33:49,200

numbers anybody want to hold okay so

690

00:33:54,789 --> 00:33:52,240

something squared e okay

691

00:33:56,870 --> 00:33:54,799

thank you i knew that jpl would offer me

692

00:34:00,310 --> 00:33:56,880

something like that okay so

693

00:34:03,590 --> 00:34:00,320

we have overcome you have overcome so

694

00:34:04,870 --> 00:34:03,600

many challenges this team has so much

695

00:34:06,549 --> 00:34:04,880

perseverance

696

00:34:08,869 --> 00:34:06,559

and we will continue to have

697

00:34:11,109 --> 00:34:08,879

perseverance so in honor of you guys

698

00:34:12,069 --> 00:34:11,119

there's a video here that tells a little

699

00:34:15,190 --> 00:34:12,079

bit about

700

00:34:16,629 --> 00:34:15,200

some more folks on the team

701  
00:34:18,470 --> 00:34:16,639  
when you go to another planet there's

702  
00:34:19,349 --> 00:34:18,480  
just so much potential for making brand

703  
00:34:20,950 --> 00:34:19,359  
new discoveries

704  
00:34:23,030 --> 00:34:20,960  
i'm actually putting something together

705  
00:34:23,669 --> 00:34:23,040  
that's flying to mars one way or another

706  
00:34:25,109 --> 00:34:23,679  
you're going to be

707  
00:34:27,030 --> 00:34:25,119  
on the ground in seven minutes we want

708  
00:34:28,470 --> 00:34:27,040  
it to be there safely

709  
00:34:29,909 --> 00:34:28,480  
my name is heather bottom and i'm

710  
00:34:30,310 --> 00:34:29,919  
helping prepare the spacecraft that will

711  
00:34:31,990 --> 00:34:30,320  
fly

712  
00:34:33,750 --> 00:34:32,000  
our next mars rover to the martian

713  
00:34:35,270 --> 00:34:33,760

surface my name is diana trujillo and i

714

00:34:37,270 --> 00:34:35,280

work with robotic arms to collect

715

00:34:38,950 --> 00:34:37,280

samples on mars i'm al chen and i lead

716

00:34:40,470 --> 00:34:38,960

the landing team for march 2020.

717

00:34:41,750 --> 00:34:40,480

my name is michelle tommy colizzi my

718

00:34:42,550 --> 00:34:41,760

name is muji gay stricker my name is

719

00:34:44,149 --> 00:34:42,560

jerry kagdar

720

00:34:46,790 --> 00:34:44,159

my name is katie stackmorgan and i'm

721

00:34:48,790 --> 00:34:46,800

helping to protect the next mars rover

722

00:34:50,550 --> 00:34:48,800

mars 2020 will be seeking signs of

723

00:34:52,069 --> 00:34:50,560

ancient life in the rock record of mars

724

00:34:53,349 --> 00:34:52,079

what we're trying to do is to drove

725

00:34:56,069 --> 00:34:53,359

around the surface of this

726

00:34:57,270 --> 00:34:56,079

unknown planet collect samples process

727

00:34:58,310 --> 00:34:57,280

the tubes as they come back

728

00:35:00,630 --> 00:34:58,320

to look for things that we call

729

00:35:01,589 --> 00:35:00,640

biosignatures so that eventually we can

730

00:35:03,270 --> 00:35:01,599

bring those samples

731

00:35:05,829 --> 00:35:03,280

back to earth and determine for the very

732

00:35:07,829 --> 00:35:05,839

first time did life exist on mars

733

00:35:09,750 --> 00:35:07,839

but also where could it be preserved for

734

00:35:09,990 --> 00:35:09,760

four more billion years for us to find

735

00:35:11,589 --> 00:35:10,000

it

736

00:35:12,710 --> 00:35:11,599

before the rover actually flies you have

737

00:35:14,470 --> 00:35:12,720

to make sure that everything works

738

00:35:16,069 --> 00:35:14,480

properly with the flight software

739

00:35:18,150 --> 00:35:16,079

and the hardware we hit the atmosphere

740

00:35:19,990 --> 00:35:18,160

going you know 12 13 000 miles per hour

741

00:35:21,510 --> 00:35:20,000

after the journey through space through

742

00:35:23,750 --> 00:35:21,520

the vacuum we

743

00:35:25,190 --> 00:35:23,760

try to test all of our hardware to the

744

00:35:26,550 --> 00:35:25,200

environments that we would see

745

00:35:28,870 --> 00:35:26,560

so that's why a lot of the testing

746

00:35:29,589 --> 00:35:28,880

happens behind me we spend lots and lots

747

00:35:31,430 --> 00:35:29,599

of hours here

748

00:35:33,589 --> 00:35:31,440

testing everything it gets put in an

749

00:35:35,829 --> 00:35:33,599

oven it gets put in various chambers and

750

00:35:38,630 --> 00:35:35,839

clean rooms so what we can see over here

751  
00:35:40,230 --> 00:35:38,640  
is the stacked spacecraft the robotic

752  
00:35:41,510 --> 00:35:40,240  
arm is actually right behind me

753  
00:35:43,190 --> 00:35:41,520  
this is the place where the magic

754  
00:35:44,710 --> 00:35:43,200  
happens this is the mars yard and this

755  
00:35:45,829 --> 00:35:44,720  
is where our rovers practice driving

756  
00:35:47,510 --> 00:35:45,839  
over rocky terrain

757  
00:35:49,589 --> 00:35:47,520  
there are hundreds of people that have

758  
00:35:50,630 --> 00:35:49,599  
to come together and build a spacecraft

759  
00:35:52,230 --> 00:35:50,640  
you kind of have to put those different

760  
00:35:52,950 --> 00:35:52,240  
pieces together and make sure that those

761  
00:35:55,349 --> 00:35:52,960  
pieces all

762  
00:35:57,510 --> 00:35:55,359  
are going to work and i feel like such a

763  
00:35:59,109 --> 00:35:57,520

lucky person to be working on this

764

00:36:00,470 --> 00:35:59,119

everything that you're touching and all

765

00:36:01,430 --> 00:36:00,480

this hard work that you're putting in

766

00:36:03,030 --> 00:36:01,440

the long hours

767

00:36:10,829 --> 00:36:03,040

20 years your children will be reading

768

00:36:24,550 --> 00:36:20,630

great

769

00:36:25,990 --> 00:36:24,560

surprise we weren't sure

770

00:36:28,870 --> 00:36:26,000

we were going to be able to do this

771

00:36:31,430 --> 00:36:28,880

today but because of the hard work

772

00:36:32,710 --> 00:36:31,440

of our team members our jpl team members

773

00:36:34,470 --> 00:36:32,720

in florida

774

00:36:36,230 --> 00:36:34,480

we have a picture we'd like to share

775

00:36:37,589 --> 00:36:36,240

with you not only has the rover name

776  
00:36:40,310 --> 00:36:37,599  
been selected

777  
00:36:54,150 --> 00:36:40,320  
but it has been placed on the flight

778  
00:36:56,950 --> 00:36:54,160  
rover robotic arms

779  
00:36:57,589 --> 00:36:56,960  
another close-up image there's our

780  
00:37:00,470 --> 00:36:57,599  
close-up

781  
00:37:02,150 --> 00:37:00,480  
image and as you guys all know when we

782  
00:37:04,310 --> 00:37:02,160  
stow the robotic arm

783  
00:37:05,349 --> 00:37:04,320  
what we look at with our cameras is

784  
00:37:07,670 --> 00:37:05,359  
perseverance

785  
00:37:09,109 --> 00:37:07,680  
so we will never forget as we're driving

786  
00:37:10,630 --> 00:37:09,119  
around mars now

787  
00:37:12,230 --> 00:37:10,640  
getting the name plate on the rover

788  
00:37:14,069 --> 00:37:12,240

isn't the last thing we have to do

789

00:37:15,109 --> 00:37:14,079

before launch but it's one of the last

790

00:37:16,470 --> 00:37:15,119

things

791

00:37:18,069 --> 00:37:16,480

i don't know you guys know a few more

792

00:37:18,950 --> 00:37:18,079

things we have to do here in the front

793

00:37:22,310 --> 00:37:18,960

row

794

00:37:23,990 --> 00:37:22,320

ray says two okay two things all right

795

00:37:26,069 --> 00:37:24,000

right now in the next two weeks we're

796

00:37:27,910 --> 00:37:26,079

finishing out the functional testing

797

00:37:29,510 --> 00:37:27,920

we want to test everything make sure it

798

00:37:32,630 --> 00:37:29,520

works before we send it off

799

00:37:33,510 --> 00:37:32,640

to mars then we'll start to stow we'll

800

00:37:35,670 --> 00:37:33,520

start to

801  
00:37:37,670 --> 00:37:35,680  
stow the rover we'll put it inside the

802  
00:37:39,030 --> 00:37:37,680  
descent stage we'll encapsulate it

803  
00:37:40,950 --> 00:37:39,040  
inside of the back shell on the heat

804  
00:37:42,710 --> 00:37:40,960  
shield add the cruise stage it will be

805  
00:37:43,750 --> 00:37:42,720  
fully stacked we'll put it on the atlas

806  
00:37:46,470 --> 00:37:43,760  
launch vehicle

807  
00:37:47,430 --> 00:37:46,480  
and we'll be ready for a july 17th

808  
00:37:49,910 --> 00:37:47,440  
launch

809  
00:37:50,950 --> 00:37:49,920  
all right back to you raquel thanks

810  
00:37:52,550 --> 00:37:50,960  
jennifer

811  
00:37:53,990 --> 00:37:52,560  
and now it is going to launch

812  
00:37:55,910 --> 00:37:54,000  
perseverance is going to launch from

813  
00:37:58,630 --> 00:37:55,920

cape canaveral florida

814

00:38:00,230 --> 00:37:58,640

this summer and it will land on mars

815

00:38:04,150 --> 00:38:00,240

february 18th

816

00:38:06,069 --> 00:38:04,160

of 2021 and now that we have a name we

817

00:38:08,630 --> 00:38:06,079

have launched the rover's new social

818

00:38:12,230 --> 00:38:08,640

media accounts so get your phones out

819

00:38:14,870 --> 00:38:12,240

you can follow at nasa persevere

820

00:38:16,870 --> 00:38:14,880

to see its journey to the red planet and

821

00:38:21,030 --> 00:38:16,880

for more information about the mission

822

00:38:25,349 --> 00:38:21,040

you can also visit [nasa.gov mars2020](https://www.nasa.gov/mars2020)

823

00:38:27,190 --> 00:38:25,359

and [mars.nasa.gov mars2020](https://mars.nasa.gov/mars2020)

824

00:38:28,550 --> 00:38:27,200

now before we get back to the school i

825

00:38:31,670 --> 00:38:28,560

know you have it all in you

826

00:38:35,349 --> 00:38:31,680

on my count can we all say

827

00:38:39,430 --> 00:38:35,359

go perseverance ready three

828

00:38:39,440 --> 00:38:44,829

that was beautiful now let's hear the

829

00:38:44,839 --> 00:38:48,870

students

830

00:38:53,990 --> 00:38:51,990

all right um i think we might be able to

831

00:38:56,230 --> 00:38:54,000

scream louder than that

832

00:38:58,310 --> 00:38:56,240

so i want to say thank you to jpl thank

833

00:38:59,750 --> 00:38:58,320

you to lake braddock secondary school

834

00:39:00,870 --> 00:38:59,760

and from all of us thank you for

835

00:39:02,550 --> 00:39:00,880

watching

836

00:39:04,069 --> 00:39:02,560

and we're gonna get ready to yell you

837

00:39:57,730 --> 00:39:04,079

guys ready