

Google+



1
00:00:10,230 --> 00:00:07,829
hi i'm debbie rivera and i'm manager of

2
00:00:11,910 --> 00:00:10,240
the nasa lego partnerships and i want to

3
00:00:14,549 --> 00:00:11,920
welcome you all to the google plus

4
00:00:17,590 --> 00:00:14,559
hangout we're here today to talk about

5
00:00:20,550 --> 00:00:17,600
our nasa lego competition it's called

6
00:00:22,950 --> 00:00:20,560
nasa's missions imagine and build

7
00:00:23,910 --> 00:00:22,960
this event is an opportunity to discuss

8
00:00:27,029 --> 00:00:23,920
the

9
00:00:29,990 --> 00:00:27,039
competition and to find out how you can

10
00:00:32,630 --> 00:00:30,000
enter a futuristic design of your own

11
00:00:35,430 --> 00:00:32,640
the competition is currently open and it

12
00:00:38,150 --> 00:00:35,440
will end on july 31st and that means

13
00:00:40,310 --> 00:00:38,160

there's only 15 more days so we're going

14

00:00:43,270 --> 00:00:40,320

to be taking some real-time questions

15

00:00:44,389 --> 00:00:43,280

using the using the hashtag asklego on

16

00:00:46,790 --> 00:00:44,399

twitter

17

00:00:47,830 --> 00:00:46,800

or from the nasa google page during the

18

00:00:49,990 --> 00:00:47,840

event

19

00:00:52,549 --> 00:00:50,000

we also have opened up a thread on

20

00:00:53,750 --> 00:00:52,559

nasa's facebook page where you can post

21

00:00:56,830 --> 00:00:53,760

questions

22

00:00:59,510 --> 00:00:56,840

so now i'd like to introduce the team

23

00:01:01,029 --> 00:00:59,520

leland good morning my name is leland

24

00:01:03,189 --> 00:01:01,039

melvin i'm the associate administrator

25

00:01:04,950 --> 00:01:03,199

for education and i'm very excited to be

26
00:01:06,870 --> 00:01:04,960
here and i'm a former astronaut too so

27
00:01:08,550 --> 00:01:06,880
let's build the future in a very grand

28
00:01:11,190 --> 00:01:08,560
way

29
00:01:13,190 --> 00:01:11,200
hi i'm april lanat and i'm an einstein

30
00:01:15,270 --> 00:01:13,200
educational fellow working at nasa

31
00:01:17,109 --> 00:01:15,280
headquarters with the aeronautics

32
00:01:18,630 --> 00:01:17,119
research mission directorate so i'll be

33
00:01:20,390 --> 00:01:18,640
answering your questions today that have

34
00:01:23,590 --> 00:01:20,400
to do with any of your aeronautics

35
00:01:28,870 --> 00:01:26,390
and how about our lego friends i'll go

36
00:01:30,870 --> 00:01:28,880
first um my name is sarah moore i'm an

37
00:01:33,789 --> 00:01:30,880
online community specialist at the lego

38
00:01:35,830 --> 00:01:33,799

group i work on a platform called

39

00:01:38,550 --> 00:01:35,840

rebrick.com where the contest is being

40

00:01:41,990 --> 00:01:38,560

hosted it's a community site for teenage

41

00:01:44,630 --> 00:01:42,000

adult fans of lego bricks

42

00:01:48,630 --> 00:01:46,789

hi my name is frederick which is very

43

00:01:49,830 --> 00:01:48,640

hard to pronounce so feel free to call

44

00:01:52,069 --> 00:01:49,840

me freddie

45

00:01:54,310 --> 00:01:52,079

i work with sarah at the lego group i'm

46

00:01:56,789 --> 00:01:54,320

a community editor and working at

47

00:01:59,109 --> 00:01:56,799

rebrick

48

00:02:00,709 --> 00:01:59,119

great so that's our team and we do have

49

00:02:02,469 --> 00:02:00,719

a lot of questions so we're going to get

50

00:02:04,630 --> 00:02:02,479

going right away

51
00:02:06,469 --> 00:02:04,640
let me take the first question

52
00:02:09,830 --> 00:02:06,479
i want to take part

53
00:02:11,990 --> 00:02:09,840
but i don't really own any lego bricks

54
00:02:14,309 --> 00:02:12,000
how can i participate

55
00:02:15,830 --> 00:02:14,319
uh freddie or sam i mean freddie or

56
00:02:17,750 --> 00:02:15,840
sarah would you like to take that

57
00:02:19,350 --> 00:02:17,760
question

58
00:02:21,430 --> 00:02:19,360
sure um

59
00:02:23,990 --> 00:02:21,440
it's fine if you don't any own any lego

60
00:02:26,390 --> 00:02:24,000
bricks because um are inventing the

61
00:02:27,350 --> 00:02:26,400
future flight competition

62
00:02:29,110 --> 00:02:27,360
actually

63
00:02:31,110 --> 00:02:29,120

invites you to use lego digital designer

64

00:02:33,830 --> 00:02:31,120

which is free software provided by the

65

00:02:35,990 --> 00:02:33,840

lego group um which you can design the

66

00:02:38,630 --> 00:02:36,000

accompanying prototype to go with your

67

00:02:40,470 --> 00:02:38,640

research paper and a link to this

68

00:02:42,229 --> 00:02:40,480

program is actually on the rules page on

69

00:02:49,589 --> 00:02:42,239

rubric.com and i think you can get to it

70

00:02:52,309 --> 00:02:50,390

okay

71

00:02:55,030 --> 00:02:52,319

um thank you very much

72

00:02:56,710 --> 00:02:55,040

um now we're gonna go to one of the

73

00:02:58,869 --> 00:02:56,720

questions we came

74

00:03:02,229 --> 00:02:58,879

that came to us from the google plus

75

00:03:05,030 --> 00:03:02,239

line and it's from crystal

76

00:03:07,910 --> 00:03:05,040

the question is would it only be design

77

00:03:09,990 --> 00:03:07,920

models or should the spacecraft have the

78

00:03:12,070 --> 00:03:10,000

ability to launch

79

00:03:14,550 --> 00:03:12,080

and i believe

80

00:03:16,949 --> 00:03:14,560

that is a great question but we're

81

00:03:19,030 --> 00:03:16,959

really looking at the design models

82

00:03:21,270 --> 00:03:19,040

would anybody else like to care to

83

00:03:23,670 --> 00:03:21,280

answer that april sure i'll take a stab

84

00:03:25,589 --> 00:03:23,680

at that so all these design models are

85

00:03:27,270 --> 00:03:25,599

just prototypes and so it's basically

86

00:03:28,790 --> 00:03:27,280

what it looks like it doesn't have to

87

00:03:30,710 --> 00:03:28,800

fly or launch

88

00:03:33,670 --> 00:03:30,720

so all you need to do is build your

89

00:03:35,270 --> 00:03:33,680

prototype and it can sit on a lego base

90

00:03:37,430 --> 00:03:35,280

plate or not

91

00:03:39,509 --> 00:03:37,440

i'll show you here we have one of our

92

00:03:41,430 --> 00:03:39,519

our nasa models and

93

00:03:43,509 --> 00:03:41,440

this right here is just a prototype so

94

00:03:45,190 --> 00:03:43,519

it doesn't fly it doesn't function but

95

00:03:47,430 --> 00:03:45,200

it has all the components on it that it

96

00:03:49,750 --> 00:03:47,440

would if it was a real working model so

97

00:03:52,550 --> 00:03:49,760

no it doesn't have to be a working model

98

00:03:54,309 --> 00:03:52,560

great question thanks

99

00:03:55,509 --> 00:03:54,319

okay crystal we want to see those

100

00:03:59,750 --> 00:03:55,519

designs

101
00:04:02,309 --> 00:03:59,760
okay by the 31st 15 more days

102
00:04:03,509 --> 00:04:02,319
if you've just joined us we are talking

103
00:04:06,309 --> 00:04:03,519
about

104
00:04:08,949 --> 00:04:06,319
the nasa lego partnership

105
00:04:11,429 --> 00:04:08,959
called nasa's missions imagine and build

106
00:04:13,030 --> 00:04:11,439
we're here to talk about the competition

107
00:04:15,350 --> 00:04:13,040
and we have

108
00:04:18,310 --> 00:04:15,360
15 days left in the competition to get

109
00:04:21,270 --> 00:04:18,320
your designs in i have with me today

110
00:04:25,189 --> 00:04:21,280
leland melvin and april lanat and from

111
00:04:28,150 --> 00:04:25,199
the lego group we have freddie and sarah

112
00:04:30,070 --> 00:04:28,160
so um thank you very much for people to

113
00:04:31,590 --> 00:04:30,080

bring in their questions and here's

114

00:04:34,310 --> 00:04:31,600

another one

115

00:04:36,950 --> 00:04:34,320

can we use stickers on the model if

116

00:04:39,510 --> 00:04:36,960

they're official lego stickers

117

00:04:42,070 --> 00:04:39,520

um sarah or freddy would you like to

118

00:04:43,030 --> 00:04:42,080

answer that question

119

00:04:46,070 --> 00:04:43,040

yes

120

00:04:49,110 --> 00:04:46,080

you can absolutely use stickers

121

00:04:50,710 --> 00:04:49,120

the only exception is

122

00:04:56,310 --> 00:04:50,720

that

123

00:04:59,590 --> 00:04:56,320

the lego logo unfortunately we cannot

124

00:05:01,350 --> 00:04:59,600

use any models using these logos as that

125

00:05:02,469 --> 00:05:01,360

would imply that we're endorsing that

126

00:05:04,310 --> 00:05:02,479

entry

127

00:05:06,230 --> 00:05:04,320

but other stickers are absolutely all

128

00:05:09,189 --> 00:05:06,240

right

129

00:05:11,670 --> 00:05:09,199

great thank you very much

130

00:05:13,430 --> 00:05:11,680

we have another question and this one i

131

00:05:16,469 --> 00:05:13,440

think leland you should be able to

132

00:05:19,350 --> 00:05:16,479

answer this one okay um

133

00:05:21,270 --> 00:05:19,360

she says i am 12 years old and i can't

134

00:05:23,670 --> 00:05:21,280

enter the competition because you know

135

00:05:25,029 --> 00:05:23,680

this competition is for 13 years old

136

00:05:27,510 --> 00:05:25,039

plus

137

00:05:29,430 --> 00:05:27,520

will there be other nasa or lego

138

00:05:31,590 --> 00:05:29,440

contests coming up

139

00:05:33,029 --> 00:05:31,600

well there are some really cool contests

140

00:05:35,350 --> 00:05:33,039

going on right now there's one called

141

00:05:38,150 --> 00:05:35,360

the exploration design challenge it's

142

00:05:41,590 --> 00:05:38,160

for kindergarten through 12th grade if

143

00:05:44,070 --> 00:05:41,600

you go to [nasa.gov education](https://www.nasa.gov/education) you can see

144

00:05:46,469 --> 00:05:44,080

this design challenge it's where we have

145

00:05:49,029 --> 00:05:46,479

students building radiation shields to

146

00:05:50,950 --> 00:05:49,039

actually fly on the orion vehicle so

147

00:05:52,469 --> 00:05:50,960

it's really cool check it out you'll

148

00:05:53,990 --> 00:05:52,479

learn about radiation

149

00:05:56,070 --> 00:05:54,000

um how you can protect yourselves how

150

00:05:58,629 --> 00:05:56,080

astronauts can protect themselves going

151

00:06:00,230 --> 00:05:58,639

to mars one day and so it's a really

152

00:06:01,670 --> 00:06:00,240

cool competition there are other things

153

00:06:04,309 --> 00:06:01,680

that are out there that you can do just

154

00:06:05,990 --> 00:06:04,319

go to nasa.gov education you'll see some

155

00:06:08,710 --> 00:06:06,000

of the cool things we do at nasa for

156

00:06:11,830 --> 00:06:08,720

education awesome and thanks so much for

157

00:06:14,230 --> 00:06:11,840

that leland um also we had do have a

158

00:06:16,710 --> 00:06:14,240

follow-up question for leland and that

159

00:06:19,430 --> 00:06:16,720

one is will you be one of the

160

00:06:22,629 --> 00:06:19,440

competition judges

161

00:06:23,670 --> 00:06:22,639

well yes i will myself and another nasa

162

00:06:26,390 --> 00:06:23,680

colleague

163

00:06:29,110 --> 00:06:26,400

and two designers will be judging all of

164

00:06:31,590 --> 00:06:29,120

the contestants so get your design in 15

165

00:06:32,550 --> 00:06:31,600

days left and we want to see some really

166

00:06:34,790 --> 00:06:32,560

cool

167

00:06:37,270 --> 00:06:34,800

way out there exotic futuristic stuff

168

00:06:38,950 --> 00:06:37,280

because these designs may one day be

169

00:06:41,670 --> 00:06:38,960

what our designers and engineers here

170

00:06:43,110 --> 00:06:41,680

use at nasa to build a i don't know

171

00:06:46,469 --> 00:06:43,120

build the next vehicle that's going to

172

00:06:48,230 --> 00:06:46,479

mars so be very creative be very open

173

00:06:49,909 --> 00:06:48,240

and some of these futuristic airplanes

174

00:06:51,670 --> 00:06:49,919

that april's showing you right here you

175

00:06:53,590 --> 00:06:51,680

know those are the designs that we want

176

00:06:55,029 --> 00:06:53,600

to see your your best work so

177

00:06:58,070 --> 00:06:55,039

looking forward to that

178

00:07:01,029 --> 00:06:58,080

you know speaking of april and the

179

00:07:03,029 --> 00:07:01,039

aeronautics missions um one another

180

00:07:06,230 --> 00:07:03,039

question that we have had

181

00:07:09,430 --> 00:07:06,240

is this inventing the future of flight

182

00:07:11,749 --> 00:07:09,440

competition requires a technical paper

183

00:07:15,029 --> 00:07:11,759

april can you tell us what is involved

184

00:07:16,790 --> 00:07:15,039

in that technical paper sure i'd love to

185

00:07:18,790 --> 00:07:16,800

so the technical paper don't let

186

00:07:21,189 --> 00:07:18,800

yourselves be scared off by the term

187

00:07:22,550 --> 00:07:21,199

technical paper so what we want to know

188

00:07:24,309 --> 00:07:22,560

is we want to know more about your

189

00:07:26,469 --> 00:07:24,319

designs so you have all these great

190

00:07:27,909 --> 00:07:26,479

ideas and all these great designs but

191

00:07:29,589 --> 00:07:27,919

you need to be able to show it off and

192

00:07:31,430 --> 00:07:29,599

so what we need is we need a paper that

193

00:07:34,309 --> 00:07:31,440

goes along with it and the paper

194

00:07:37,029 --> 00:07:34,319

explains what your prototype is explains

195

00:07:38,710 --> 00:07:37,039

your design and it also explains why it

196

00:07:40,469 --> 00:07:38,720

would fit well with what we're working

197

00:07:43,110 --> 00:07:40,479

on right now so if you take your

198

00:07:45,350 --> 00:07:43,120

technical paper if you you just add your

199

00:07:47,830 --> 00:07:45,360

details of your of your design and

200

00:07:49,430 --> 00:07:47,840

that'll be great if you go to the the

201

00:07:50,870 --> 00:07:49,440

rebrick site it'll tell you all the

202

00:07:52,309 --> 00:07:50,880

details for the paper it takes you

203

00:07:53,670 --> 00:07:52,319

through it step by step so you don't

204

00:07:55,749 --> 00:07:53,680

have to worry about starting from

205

00:07:57,350 --> 00:07:55,759

scratch it'll tell you exactly what we

206

00:07:59,589 --> 00:07:57,360

want but we basically want an

207

00:08:01,670 --> 00:07:59,599

explanation of your aircraft and why

208

00:08:04,469 --> 00:08:01,680

it's so great

209

00:08:06,550 --> 00:08:04,479

awesome so don't be afraid

210

00:08:08,869 --> 00:08:06,560

but did i tell you you only have 15 more

211

00:08:12,550 --> 00:08:08,879

days okay so

212

00:08:15,029 --> 00:08:12,560

um moving on we have a question from

213

00:08:17,830 --> 00:08:15,039

twitter uh courtney has asked this

214

00:08:21,029 --> 00:08:17,840

particular question and it's a really

215

00:08:23,830 --> 00:08:21,039

good one it's talking about what exactly

216

00:08:26,230 --> 00:08:23,840

is the goal of the competition

217

00:08:27,189 --> 00:08:26,240

and i'm going to answer the one like how

218

00:08:30,070 --> 00:08:27,199

how

219

00:08:32,149 --> 00:08:30,080

what the goal is for nasa and for lego

220

00:08:34,709 --> 00:08:32,159

but then i think there's also another

221

00:08:36,949 --> 00:08:34,719

aspect of that question and that is what

222

00:08:40,230 --> 00:08:36,959

is the goal of the competition for the

223

00:08:42,469 --> 00:08:40,240

folks that are actually

224

00:08:45,110 --> 00:08:42,479

entering their designs so let's start

225

00:08:47,509 --> 00:08:45,120

with the first one the first one is what

226

00:08:49,990 --> 00:08:47,519

is nasa and leg why is nasa and lego

227

00:08:51,750 --> 00:08:50,000

doing this competition

228

00:08:53,829 --> 00:08:51,760

we came into

229

00:08:56,150 --> 00:08:53,839

many years ago a really terrific

230

00:08:57,430 --> 00:08:56,160

partnership nasa and lego because we had

231

00:08:59,269 --> 00:08:57,440

mutual

232

00:09:02,870 --> 00:08:59,279

things that we wanted to do

233

00:09:04,949 --> 00:09:02,880

and one of it was how can we get

234

00:09:07,190 --> 00:09:04,959

information about our

235

00:09:10,790 --> 00:09:07,200

products and missions out

236

00:09:13,670 --> 00:09:10,800

in a innovative way that would capture

237

00:09:15,910 --> 00:09:13,680

the interests and engagement of the

238

00:09:17,910 --> 00:09:15,920

public well one of the things that we're

239

00:09:18,710 --> 00:09:17,920

doing is this competition

240

00:09:22,470 --> 00:09:18,720

through

241

00:09:25,750 --> 00:09:22,480

you taking a look at what nasa is doing

242

00:09:32,150 --> 00:09:29,829

and uh we um we have uh just a lot of

243

00:09:36,470 --> 00:09:32,160

missions to talk about but with this

244

00:09:39,190 --> 00:09:36,480

focused competition we can um

245

00:09:41,990 --> 00:09:39,200

we can see what you guys can find out

246

00:09:44,070 --> 00:09:42,000

about nasa you can go to nasa.gov find

247

00:09:47,750 --> 00:09:44,080

out all about our missions and that

248

00:09:50,470 --> 00:09:47,760

helps us get our story out to you okay

249

00:09:53,910 --> 00:09:50,480

so that is one of the major goals for

250

00:09:54,870 --> 00:09:53,920

nasa and i think lego also has some so

251
00:09:57,269 --> 00:09:54,880
when

252
00:10:00,310 --> 00:09:57,279
they're able they can they can give you

253
00:10:03,269 --> 00:10:00,320
their goals of the competition so before

254
00:10:05,990 --> 00:10:03,279
we go to that second part of what what

255
00:10:09,509 --> 00:10:06,000
are the goals uh courtney i'd like to

256
00:10:12,070 --> 00:10:09,519
see if freddie might be able to

257
00:10:15,110 --> 00:10:12,080
give us an answer of what the lego goals

258
00:10:18,150 --> 00:10:15,120
are for the competition freddy

259
00:10:20,870 --> 00:10:18,160
well some of the goals for for most of

260
00:10:23,030 --> 00:10:20,880
our lego fans are also

261
00:10:25,590 --> 00:10:23,040
great fans of of

262
00:10:28,310 --> 00:10:25,600
space and they are not a mixed and and

263
00:10:30,310 --> 00:10:28,320

nasa so that's you know for lego it's a

264

00:10:32,949 --> 00:10:30,320

great opportunity and for the fans it's

265

00:10:35,590 --> 00:10:32,959

an amazing opportunity to to do to

266

00:10:37,990 --> 00:10:35,600

combine those two interests um and i

267

00:10:41,269 --> 00:10:38,000

think that's what really is is peaking

268

00:10:43,590 --> 00:10:41,279

in interest um for for lego the lego

269

00:10:44,829 --> 00:10:43,600

group but also for the lego fans

270

00:10:48,230 --> 00:10:44,839

um and

271

00:10:49,509 --> 00:10:48,240

obviously for the lego fan it's it's

272

00:10:51,269 --> 00:10:49,519

you know

273

00:10:54,470 --> 00:10:51,279

there's nothing cooler than to say that

274

00:10:56,710 --> 00:10:54,480

that you've won something with nasa so i

275

00:11:00,630 --> 00:10:56,720

think that in itself is uh

276

00:11:02,790 --> 00:11:00,640

it's a it's a pretty awesome goal

277

00:11:04,630 --> 00:11:02,800

and i just think another another really

278

00:11:07,110 --> 00:11:04,640

cool goal of this this partnership is

279

00:11:08,470 --> 00:11:07,120

that we're getting people that maybe

280

00:11:10,550 --> 00:11:08,480

never have thought of themselves as

281

00:11:12,150 --> 00:11:10,560

being scientists and engineers and

282

00:11:14,150 --> 00:11:12,160

they're building something developing

283

00:11:17,190 --> 00:11:14,160

something creating something that may

284

00:11:19,670 --> 00:11:17,200

one day end up as the model of you know

285

00:11:20,470 --> 00:11:19,680

the vehicle going to mars and so i think

286

00:11:26,230 --> 00:11:20,480

we're

287

00:11:29,110 --> 00:11:26,240

know the principles of design and

288

00:11:31,829 --> 00:11:29,120

building of these futuristic vehicles

289

00:11:34,790 --> 00:11:31,839

and these futuristic satellites and you

290

00:11:36,550 --> 00:11:34,800

know robots whatever we build um but we

291

00:11:38,870 --> 00:11:36,560

have a whole new group of people that

292

00:11:40,870 --> 00:11:38,880

are now learning more about nasa

293

00:11:43,190 --> 00:11:40,880

and how we can save our planet from an

294

00:11:46,150 --> 00:11:43,200

asteroid one day or how we can save you

295

00:11:47,990 --> 00:11:46,160

know get astronauts to to mars safely so

296

00:11:50,389 --> 00:11:48,000

i think that's another big goal is to

297

00:11:52,230 --> 00:11:50,399

let this whole base of people

298

00:11:54,550 --> 00:11:52,240

in our on in the world because everyone

299

00:11:56,150 --> 00:11:54,560

knows what legos are you know to to know

300

00:11:57,590 --> 00:11:56,160

about what we're doing at nasa and it

301
00:11:59,829 --> 00:11:57,600
can help everyone

302
00:12:02,069 --> 00:11:59,839
you're absolutely radiation to space to

303
00:12:04,470 --> 00:12:02,079
everything exactly and i think it goes

304
00:12:07,509 --> 00:12:04,480
both ways because for a lot of people

305
00:12:10,069 --> 00:12:07,519
who um work with lego on

306
00:12:11,670 --> 00:12:10,079
breaks on a general basis they might not

307
00:12:13,670 --> 00:12:11,680
think that they are engineers and have

308
00:12:16,150 --> 00:12:13,680
the capability of building and on the

309
00:12:17,750 --> 00:12:16,160
other hand people who are used to to

310
00:12:20,949 --> 00:12:17,760
engineering and building may not think

311
00:12:25,590 --> 00:12:20,959
of the lego brick as as a tool to build

312
00:12:26,629 --> 00:12:25,600
so it's it's really a fun combination

313
00:12:27,430 --> 00:12:26,639

awesome

314

00:12:31,110 --> 00:12:27,440

um

315

00:12:33,190 --> 00:12:31,120

we have another question from

316

00:12:35,750 --> 00:12:33,200

google plus and that's

317

00:12:37,670 --> 00:12:35,760

forgive me if i mispronounce your name

318

00:12:39,350 --> 00:12:37,680

there richoff

319

00:12:41,190 --> 00:12:39,360

and uh

320

00:12:43,990 --> 00:12:41,200

they would like to know

321

00:12:45,350 --> 00:12:44,000

can an adult participate in this event

322

00:12:47,030 --> 00:12:45,360

with a teen

323

00:12:48,790 --> 00:12:47,040

and april would you like to take that

324

00:12:50,870 --> 00:12:48,800

question absolutely

325

00:12:53,030 --> 00:12:50,880

so the answer is yes you can definitely

326

00:12:55,670 --> 00:12:53,040

join as a team and we would love to see

327

00:12:57,670 --> 00:12:55,680

exactly that kind of that kind of team

328

00:12:59,670 --> 00:12:57,680

going so we have two categories if

329

00:13:01,829 --> 00:12:59,680

you're working on the um on the

330

00:13:04,069 --> 00:13:01,839

inventing the future of flight there's a

331

00:13:06,150 --> 00:13:04,079

young builders category that's for ages

332

00:13:07,590 --> 00:13:06,160

13 through 18 and if you're that age

333

00:13:09,670 --> 00:13:07,600

you're automatically entered into that

334

00:13:11,030 --> 00:13:09,680

category however you're not limited

335

00:13:13,670 --> 00:13:11,040

you're also a part of the larger

336

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

category if you enter with an adult all

337

00:13:17,350 --> 00:13:15,600

it does is doesn't qualify you for the

338

00:13:19,350 --> 00:13:17,360

young builders category because you have

339

00:13:21,190 --> 00:13:19,360

two people in the contest

340

00:13:23,030 --> 00:13:21,200

but definitely enter and that would be a

341

00:13:25,590 --> 00:13:23,040

great partnership you'd probably come up

342

00:13:26,949 --> 00:13:25,600

with some great ideas that one if you

343

00:13:30,150 --> 00:13:26,959

entered by yourself wouldn't come up

344

00:13:35,990 --> 00:13:32,629

great great thanks so much

345

00:13:41,430 --> 00:13:36,000

okay i'm looking for the next question

346

00:13:44,389 --> 00:13:41,440

um and uh while we're talking about um

347

00:13:47,110 --> 00:13:44,399

things to think about for designing and

348

00:13:50,310 --> 00:13:47,120

entering into the competition there is a

349

00:13:53,190 --> 00:13:50,320

question for april and that is i have a

350

00:13:54,310 --> 00:13:53,200

great idea for an unmanned aircraft

351
00:13:57,590 --> 00:13:54,320
design

352
00:13:59,350 --> 00:13:57,600
does the aircraft need to have a pilot

353
00:14:01,350 --> 00:13:59,360
that's another great question and no you

354
00:14:02,870 --> 00:14:01,360
don't have to have a pilot

355
00:14:04,870 --> 00:14:02,880
aircraft of the future are going to be

356
00:14:06,470 --> 00:14:04,880
flying in all kinds of ways some that we

357
00:14:09,030 --> 00:14:06,480
know about and some that we don't even

358
00:14:10,790 --> 00:14:09,040
know about unmanned aircraft are really

359
00:14:13,430 --> 00:14:10,800
starting to become more and more

360
00:14:15,670 --> 00:14:13,440
prominent and more designs are are going

361
00:14:17,590 --> 00:14:15,680
on with that so note your airplane does

362
00:14:19,670 --> 00:14:17,600
not have to have a pilot we want to see

363
00:14:21,509 --> 00:14:19,680

exactly what you can come up with like

364

00:14:23,430 --> 00:14:21,519

we said it's the future of flight so

365

00:14:25,750 --> 00:14:23,440

that can be pretty much anything you can

366

00:14:27,509 --> 00:14:25,760

imagine so

367

00:14:42,790 --> 00:14:27,519

the sky's the limit

368

00:14:47,590 --> 00:14:44,710

that's right okay cool

369

00:14:50,629 --> 00:14:47,600

um all right let's see um in case you

370

00:14:53,750 --> 00:14:50,639

have just joined us we are here

371

00:14:56,870 --> 00:14:53,760

at a google plus hangout we're talking

372

00:14:59,590 --> 00:14:56,880

about the nasa lego partnership

373

00:15:02,470 --> 00:14:59,600

competition called nasa's missions

374

00:15:05,750 --> 00:15:02,480

imagine and build i'm debbie rivera and

375

00:15:08,310 --> 00:15:05,760

i head up the nasa lego partnership and

376

00:15:10,790 --> 00:15:08,320

with me today is leland melvin

377

00:15:14,470 --> 00:15:10,800

as well as april lanat

378

00:15:17,269 --> 00:15:14,480

and we have two folks from lego um

379

00:15:18,069 --> 00:15:17,279

freddie hoff and sarah moore

380

00:15:20,550 --> 00:15:18,079

so

381

00:15:23,910 --> 00:15:20,560

what we're doing is we are

382

00:15:27,269 --> 00:15:23,920

getting your questions off of twitter

383

00:15:28,870 --> 00:15:27,279

with a hashtag of ask lego

384

00:15:31,990 --> 00:15:28,880

and also

385

00:15:34,710 --> 00:15:32,000

we have the google plus where you can

386

00:15:36,870 --> 00:15:34,720

post your questions and a thread off of

387

00:15:39,670 --> 00:15:36,880

nasa's facebook page

388

00:15:43,189 --> 00:15:39,680

so with that uh we're going to start

389

00:15:44,389 --> 00:15:43,199

answering some more questions

390

00:15:45,910 --> 00:15:44,399

um

391

00:15:48,550 --> 00:15:45,920

another quick question

392

00:15:50,629 --> 00:15:48,560

hey right here from the studio we have

393

00:15:51,430 --> 00:15:50,639

leland melvin with a question how big a

394

00:15:52,629 --> 00:15:51,440

team

395

00:15:55,509 --> 00:15:52,639

can we have

396

00:15:58,550 --> 00:15:55,519

is it limited to correct question we

397

00:16:00,629 --> 00:15:58,560

have a limit of up to five people on a

398

00:16:02,389 --> 00:16:00,639

date people per team right so if you

399

00:16:05,030 --> 00:16:02,399

have more than that just feel free to

400

00:16:07,189 --> 00:16:05,040

split into separate teams and get busy

401

00:16:09,269 --> 00:16:07,199

with your with your designs okay

402

00:16:11,030 --> 00:16:09,279

remember and exactly and that's a great

403

00:16:14,150 --> 00:16:11,040

question because then what i'd like to

404

00:16:16,949 --> 00:16:14,160

do because some people may be new to the

405

00:16:19,670 --> 00:16:16,959

google plus hangout um freddie maybe you

406

00:16:21,670 --> 00:16:19,680

want to freddie or sarah maybe you want

407

00:16:23,829 --> 00:16:21,680

to just

408

00:16:25,749 --> 00:16:23,839

restate that there's two parts of the

409

00:16:28,310 --> 00:16:25,759

competition and what those two

410

00:16:30,870 --> 00:16:28,320

competitions are

411

00:16:33,670 --> 00:16:30,880

so um

412

00:16:36,710 --> 00:16:33,680

the overall competition has two parts

413

00:16:38,629 --> 00:16:36,720

one is the inventing our future of

414

00:16:42,949 --> 00:16:38,639

flight competition

415

00:16:46,870 --> 00:16:42,959

um now this is uh sort of the academic

416

00:16:50,150 --> 00:16:46,880

part of it which is uh where you write

417

00:16:54,069 --> 00:16:50,160

an academic paper and at the same time

418

00:16:57,430 --> 00:16:54,079

you build a model to go with that

419

00:16:59,749 --> 00:16:57,440

paper the other competition is our

420

00:17:01,350 --> 00:16:59,759

um imagine our future beyond earth

421

00:17:04,630 --> 00:17:01,360

competition we don't have cereal which

422

00:17:07,909 --> 00:17:04,640

is more of a free build competition

423

00:17:10,949 --> 00:17:07,919

which is um where you build

424

00:17:13,750 --> 00:17:10,959

whatever your imagine holds from one of

425

00:17:14,829 --> 00:17:13,760

the future nasa missions

426

00:17:17,189 --> 00:17:14,839

until

427

00:17:20,949 --> 00:17:17,199

2030 i think

428

00:17:23,429 --> 00:17:20,959

um so they're they're both very exciting

429

00:17:26,309 --> 00:17:23,439

and very different and what you can do

430

00:17:27,909 --> 00:17:26,319

to read up on them is to go to

431

00:17:30,070 --> 00:17:27,919

rebrick.com

432

00:17:31,590 --> 00:17:30,080

and there's a big banner right on the

433

00:17:33,430 --> 00:17:31,600

front page

434

00:17:35,510 --> 00:17:33,440

and if you click on that and that will

435

00:17:38,950 --> 00:17:35,520

take you to the rules for both of the

436

00:17:43,430 --> 00:17:41,190

great thanks a lot freddie

437

00:17:46,310 --> 00:17:43,440

in fact here's one from some of our

438

00:17:49,029 --> 00:17:46,320

friends in huntsville alabama this is

439

00:17:51,270 --> 00:17:49,039

coming in from google plus as many of

440

00:17:52,390 --> 00:17:51,280

you know we have a nasa field center

441

00:17:55,350 --> 00:17:52,400

down there

442

00:17:58,310 --> 00:17:55,360

and wesley says i live in huntsville

443

00:18:01,270 --> 00:17:58,320

where nasa is huge

444

00:18:03,350 --> 00:18:01,280

how can i engage lego to do something

445

00:18:05,430 --> 00:18:03,360

like this for younger kids

446

00:18:08,150 --> 00:18:05,440

so i think this is a very appropriate

447

00:18:10,789 --> 00:18:08,160

question for our friend

448

00:18:14,630 --> 00:18:11,909

um

449

00:18:16,630 --> 00:18:14,640

i am pretty sure that that

450

00:18:18,870 --> 00:18:16,640

the lego group would be interested in

451
00:18:20,070 --> 00:18:18,880
doing something for younger kids as well

452
00:18:21,110 --> 00:18:20,080
um

453
00:18:24,230 --> 00:18:21,120
i think

454
00:18:26,830 --> 00:18:24,240
the best thing to do is to to

455
00:18:30,390 --> 00:18:26,840
you know get a hold of

456
00:18:32,230 --> 00:18:30,400
both lego the lego group and and nasa

457
00:18:34,310 --> 00:18:32,240
and write an email come with a

458
00:18:37,830 --> 00:18:34,320
suggestion of what you think would be a

459
00:18:39,270 --> 00:18:37,840
cool idea um i certainly know that

460
00:18:41,350 --> 00:18:39,280
we've been really excited about this

461
00:18:42,950 --> 00:18:41,360
collaboration so i don't see why there

462
00:18:45,750 --> 00:18:42,960
would be a possibility of another

463
00:18:47,750 --> 00:18:45,760

cooperation in the future

464

00:18:49,590 --> 00:18:47,760

and i think definitely if you're a

465

00:18:52,390 --> 00:18:49,600

younger kid and you're you know you're

466

00:18:54,070 --> 00:18:52,400

13 or younger well 12 or younger

467

00:18:56,150 --> 00:18:54,080

you know create something build

468

00:18:56,950 --> 00:18:56,160

something and then post your design out

469

00:19:01,750 --> 00:18:56,960

there

470

00:19:04,070 --> 00:19:01,760

other people besides lego even nasa that

471

00:19:06,470 --> 00:19:04,080

may like your design and want to bring

472

00:19:08,630 --> 00:19:06,480

you on to start a new competition so

473

00:19:10,549 --> 00:19:08,640

don't just limit yourself you know use

474

00:19:12,789 --> 00:19:10,559

your own mind to be creative

475

00:19:14,390 --> 00:19:12,799

and build develop create and someone may

476
00:19:16,630 --> 00:19:14,400
say that's one of the most innovative

477
00:19:18,390 --> 00:19:16,640
things that i've seen and take that so

478
00:19:20,789 --> 00:19:18,400
don't don't limit yourself you can do

479
00:19:22,470 --> 00:19:20,799
anything you put your mind to

480
00:19:25,510 --> 00:19:22,480
wonderful wonderful

481
00:19:27,110 --> 00:19:25,520
okay um we have another question from

482
00:19:29,750 --> 00:19:27,120
our google plus

483
00:19:30,870 --> 00:19:29,760
group and this is from jorge and this is

484
00:19:32,230 --> 00:19:30,880
to april

485
00:19:34,630 --> 00:19:32,240
um

486
00:19:36,870 --> 00:19:34,640
our children are from mexico can they

487
00:19:39,750 --> 00:19:36,880
participate in this competition

488
00:19:42,070 --> 00:19:39,760

definitely as long as you are 13 and

489

00:19:44,549 --> 00:19:42,080

over then you're open to participate

490

00:19:45,430 --> 00:19:44,559

from anywhere around the world teammates

491

00:19:46,950 --> 00:19:45,440

can be

492

00:19:49,270 --> 00:19:46,960

right there with each other or you can

493

00:19:50,710 --> 00:19:49,280

even collaborate across continents if

494

00:19:52,549 --> 00:19:50,720

you have other teammates in other

495

00:19:55,909 --> 00:19:52,559

countries that want to participate so

496

00:19:58,390 --> 00:19:55,919

everybody is free to participate

497

00:20:01,190 --> 00:19:58,400

now with with the design software can

498

00:20:02,470 --> 00:20:01,200

you collaborate across

499

00:20:04,630 --> 00:20:02,480

you know from different different

500

00:20:06,470 --> 00:20:04,640

computers yeah so you can so when you

501
00:20:08,789 --> 00:20:06,480
use the lego digital designer if that's

502
00:20:10,630 --> 00:20:08,799
what you're using you go in you create

503
00:20:12,630 --> 00:20:10,640
your prototype you create you design

504
00:20:14,789 --> 00:20:12,640
your build and you save it just like a

505
00:20:16,710 --> 00:20:14,799
regular file everyone would have to have

506
00:20:18,630 --> 00:20:16,720
the same software on their computer but

507
00:20:20,150 --> 00:20:18,640
you can send it to each other work on it

508
00:20:21,830 --> 00:20:20,160
send it back it would be a great way to

509
00:20:23,590 --> 00:20:21,840
collaborate and that's how we

510
00:20:25,110 --> 00:20:23,600
collaborate here at nasa we work with

511
00:20:26,710 --> 00:20:25,120
partners from all around the world to

512
00:20:28,789 --> 00:20:26,720
build the international space station

513
00:20:30,149 --> 00:20:28,799

and sometimes these parts have never

514

00:20:33,510 --> 00:20:30,159

come together

515

00:20:35,350 --> 00:20:33,520

space and so that's how we do designs

516

00:20:37,110 --> 00:20:35,360

and with the with the first competition

517

00:20:39,350 --> 00:20:37,120

for aviation you're writing this

518

00:20:41,029 --> 00:20:39,360

technical paper this paper helps you

519

00:20:42,789 --> 00:20:41,039

with design you know if you were working

520

00:20:44,710 --> 00:20:42,799

with someone else how could this other

521

00:20:46,789 --> 00:20:44,720

person start to build your design so

522

00:20:47,909 --> 00:20:46,799

that paper can help exactly that and

523

00:20:50,230 --> 00:20:47,919

that's the whole point of the

524

00:20:52,630 --> 00:20:50,240

competition is to make it as realistic

525

00:20:54,310 --> 00:20:52,640

as possible nasa collaborates with each

526
00:20:55,830 --> 00:20:54,320
other we have 10 different centers

527
00:20:57,990 --> 00:20:55,840
across the country and then like you

528
00:21:00,230 --> 00:20:58,000
said we're cooperating internationally

529
00:21:02,470 --> 00:21:00,240
as well and so we want this to be you

530
00:21:04,390 --> 00:21:02,480
know based on real life scenarios so

531
00:21:06,149 --> 00:21:04,400
when it comes to the aviation contest

532
00:21:08,789 --> 00:21:06,159
we're designing it after a program that

533
00:21:11,590 --> 00:21:08,799
we call n plus three and what that is is

534
00:21:13,590 --> 00:21:11,600
taking nasa's next generation not this

535
00:21:15,270 --> 00:21:13,600
the next generation but the generation

536
00:21:16,950 --> 00:21:15,280
after that and the third generation

537
00:21:20,070 --> 00:21:16,960
after that and looking at what aircraft

538
00:21:22,870 --> 00:21:20,080

will look like 10 20 30 years in the

539

00:21:25,110 --> 00:21:22,880

future and right now university and

540

00:21:27,430 --> 00:21:25,120

commercial teams are working on these

541

00:21:29,750 --> 00:21:27,440

designs like you see right here these

542

00:21:31,750 --> 00:21:29,760

are done by college students and

543

00:21:34,070 --> 00:21:31,760

commercial partners working together

544

00:21:35,909 --> 00:21:34,080

again remotely they don't always see

545

00:21:38,070 --> 00:21:35,919

each other they're working on teams

546

00:21:39,430 --> 00:21:38,080

spread out all over the place and so the

547

00:21:41,990 --> 00:21:39,440

idea and the reason we have the

548

00:21:43,669 --> 00:21:42,000

technical paper is so that it matches

549

00:21:45,190 --> 00:21:43,679

just what those people are doing so we

550

00:21:47,029 --> 00:21:45,200

want to see what everybody else can

551

00:21:48,630 --> 00:21:47,039

build just because a university

552

00:21:50,390 --> 00:21:48,640

student's building it doesn't mean that

553

00:21:52,310 --> 00:21:50,400

you can't come up with a design that

554

00:21:54,149 --> 00:21:52,320

might be something completely unique and

555

00:21:55,750 --> 00:21:54,159

something that someone else may never

556

00:21:58,870 --> 00:21:55,760

have thought of before so we want to see

557

00:22:00,390 --> 00:21:58,880

what you can do too exactly yeah great i

558

00:22:02,470 --> 00:22:00,400

just want to interject here this is

559

00:22:04,950 --> 00:22:02,480

sarah again um

560

00:22:07,350 --> 00:22:04,960

going back to the question about um

561

00:22:09,669 --> 00:22:07,360

countries that can participate um it's

562

00:22:11,430 --> 00:22:09,679

fine mexico is fine for participation

563

00:22:13,110 --> 00:22:11,440

but we do have a few

564

00:22:15,750 --> 00:22:13,120

um areas

565

00:22:18,789 --> 00:22:15,760

that are you know we just can't um due

566

00:22:21,510 --> 00:22:18,799

to the air the own country's rules have

567

00:22:24,630 --> 00:22:21,520

participation you know places like

568

00:22:26,789 --> 00:22:24,640

cuba north korea um that those kinds of

569

00:22:29,750 --> 00:22:26,799

locations um it's all listed in our

570

00:22:32,070 --> 00:22:29,760

rules on rebrick.com so if you're

571

00:22:34,470 --> 00:22:32,080

concerned about your country um

572

00:22:36,310 --> 00:22:34,480

of origin please check out uh

573

00:22:38,549 --> 00:22:36,320

rebrick.com

574

00:22:41,750 --> 00:22:38,559

great point thanks sarah yeah thanks

575

00:22:44,710 --> 00:22:41,760

very much um as a matter of fact while

576

00:22:46,470 --> 00:22:44,720

we are talking to our lego fan folks

577

00:22:48,710 --> 00:22:46,480

over there um whether it's in

578

00:22:49,669 --> 00:22:48,720

connecticut or denmark today sarah or

579

00:22:51,029 --> 00:22:49,679

freddie

580

00:22:52,710 --> 00:22:51,039

um i

581

00:22:54,950 --> 00:22:52,720

would like to give you a question from

582

00:22:59,830 --> 00:22:54,960

courtney over twitter

583

00:23:04,070 --> 00:23:02,070

hi i'll take that um

584

00:23:06,230 --> 00:23:04,080

winners are picked by a panel of judges

585

00:23:08,710 --> 00:23:06,240

depending on the competition

586

00:23:10,950 --> 00:23:08,720

for our inventing uh the future of

587

00:23:12,549 --> 00:23:10,960

flight competition uh leland will be one

588

00:23:13,830 --> 00:23:12,559

of the judges there i think he'll be a

589

00:23:15,909 --> 00:23:13,840

judge in both of the competitions i

590

00:23:17,669 --> 00:23:15,919

believe actually so it's really making

591

00:23:21,590 --> 00:23:17,679

him happy that you have to

592

00:23:24,789 --> 00:23:21,600

cater to um but we also will have um we

593

00:23:27,750 --> 00:23:24,799

also have another engineer from nasa i

594

00:23:30,390 --> 00:23:27,760

believe and a lego specialist as well

595

00:23:32,470 --> 00:23:30,400

for that competition and then and in the

596

00:23:35,350 --> 00:23:32,480

other competition the free build imagine

597

00:23:38,310 --> 00:23:35,360

the future beyond earth that will have

598

00:23:39,510 --> 00:23:38,320

two lego designers as the judge along

599

00:23:42,230 --> 00:23:39,520

with england

600

00:23:49,270 --> 00:23:45,510

they will pick the best bottles

601
00:23:53,270 --> 00:23:49,280
and um just to add that add to that uh

602
00:23:54,870 --> 00:23:53,280
in the rules and what have you uh sarah

603
00:23:57,750 --> 00:23:54,880
is there some more information about

604
00:24:00,870 --> 00:23:57,760
what folks are looking for

605
00:24:03,510 --> 00:24:00,880
yes absolutely um they will be judged on

606
00:24:05,350 --> 00:24:03,520
a couple of criteria which can be found

607
00:24:08,549 --> 00:24:05,360
on the rules or i'll just pull that up

608
00:24:10,149 --> 00:24:08,559
real quickly right now um

609
00:24:12,470 --> 00:24:10,159
so

610
00:24:13,909 --> 00:24:12,480
for the uh for the imagine the future

611
00:24:15,830 --> 00:24:13,919
beyond earth

612
00:24:18,789 --> 00:24:15,840
the winning model will be judged based

613
00:24:21,269 --> 00:24:18,799

on over overall coolness and creativity

614

00:24:24,149 --> 00:24:21,279

inspired originality and the imagine our

615

00:24:26,630 --> 00:24:24,159

future beyond earth theme

616

00:24:27,750 --> 00:24:26,640

and for the other set of rules

617

00:24:29,830 --> 00:24:27,760

i have it all

618

00:24:31,190 --> 00:24:29,840

hard copied so i have to rifle through a

619

00:24:35,909 --> 00:24:31,200

little bit

620

00:24:41,590 --> 00:24:38,870

the research paper academic one

621

00:24:44,470 --> 00:24:41,600

will be judged on a

622

00:24:47,029 --> 00:24:44,480

quite an extensive list of criteria

623

00:24:49,269 --> 00:24:47,039

which you can find on the rules page

624

00:24:54,070 --> 00:24:49,279

there um based on you know the physical

625

00:24:58,470 --> 00:24:56,950

that's very helpful thanks sarah and

626

00:25:00,710 --> 00:24:58,480

again like she said just go to

627

00:25:03,110 --> 00:25:00,720

rebrick.lego

628

00:25:05,430 --> 00:25:03,120

and you can get all the information

629

00:25:06,390 --> 00:25:05,440

so for those of you who have just joined

630

00:25:11,990 --> 00:25:06,400

us

631

00:25:14,630 --> 00:25:12,000

rivera i'm head of nasa's and nasa lego

632

00:25:16,630 --> 00:25:14,640

partnerships and we're here to discuss

633

00:25:19,430 --> 00:25:16,640

the latest competition

634

00:25:21,110 --> 00:25:19,440

and that is called nasa's missions

635

00:25:23,350 --> 00:25:21,120

imagine and build

636

00:25:27,029 --> 00:25:23,360

the competition is open but it does

637

00:25:28,950 --> 00:25:27,039

close on july 31st so we're using um the

638

00:25:30,470 --> 00:25:28,960

google plus to talk about the

639

00:25:34,070 --> 00:25:30,480

competition

640

00:25:35,110 --> 00:25:34,080

and with me today is leland melvin head

641

00:25:38,230 --> 00:25:35,120

of the

642

00:25:40,630 --> 00:25:38,240

education office here at nasa and former

643

00:25:43,110 --> 00:25:40,640

two-time shuttle astronaut

644

00:25:46,310 --> 00:25:43,120

and then we have april lenate she's our

645

00:25:49,110 --> 00:25:46,320

einstein fellow that works in the

646

00:25:50,310 --> 00:25:49,120

aeronautics research mission directorate

647

00:25:51,830 --> 00:25:50,320

our lego

648

00:25:54,470 --> 00:25:51,840

uh folks

649

00:25:57,190 --> 00:25:54,480

one of which is sarah moore and

650

00:25:59,750 --> 00:25:57,200

connecticut and the other one is freddy

651
00:26:00,950 --> 00:25:59,760
hoff and she is coming to us from

652
00:26:04,149 --> 00:26:00,960
denmark

653
00:26:06,070 --> 00:26:04,159
so thanks everybody for joining us and i

654
00:26:07,269 --> 00:26:06,080
think we're looking for our next

655
00:26:11,510 --> 00:26:07,279
question

656
00:26:14,470 --> 00:26:11,520
if you can just wait one momento

657
00:26:16,950 --> 00:26:14,480
as my my lovely assistant is writing it

658
00:26:18,710 --> 00:26:16,960
down on a piece of paper you're smiling

659
00:26:21,430 --> 00:26:18,720
lovely assistant right otherwise known

660
00:26:25,990 --> 00:26:21,440
as cindy steele give her kudos well she

661
00:26:30,390 --> 00:26:27,909
but she's still writing so hold on just

662
00:26:32,470 --> 00:26:30,400
a moment

663
00:26:34,310 --> 00:26:32,480

and sarah mentioned the coolness factor

664

00:26:36,230 --> 00:26:34,320

you know as we're judging these these

665

00:26:38,310 --> 00:26:36,240

different models you know how cool and

666

00:26:41,269 --> 00:26:38,320

imaginative you can be when you design

667

00:26:42,630 --> 00:26:41,279

these and how functional too so looking

668

00:26:44,310 --> 00:26:42,640

forward to seeing them we don't want a

669

00:26:46,070 --> 00:26:44,320

model of something that already exists

670

00:26:48,149 --> 00:26:46,080

we want something that you can think up

671

00:26:50,470 --> 00:26:48,159

that is totally different than anything

672

00:26:51,590 --> 00:26:50,480

we've thought of before right

673

00:26:55,350 --> 00:26:51,600

excellent

674

00:26:57,510 --> 00:26:55,360

okay so we have a question from twitter

675

00:27:00,149 --> 00:26:57,520

and it's from karpour

676
00:27:03,029 --> 00:27:00,159
and uh here's the question what is the

677
00:27:06,310 --> 00:27:03,039
best way to approach nasa with ideas for

678
00:27:13,350 --> 00:27:09,990
well you're the best person for that

679
00:27:21,110 --> 00:27:17,269
the best way to uh connect with nasa on

680
00:27:22,470 --> 00:27:21,120
any of your ideas is probably through

681
00:27:24,470 --> 00:27:22,480
the

682
00:27:26,789 --> 00:27:24,480
public you know you can write to nasa

683
00:27:30,950 --> 00:27:26,799
you can write to charlie bolden or you

684
00:27:33,190 --> 00:27:30,960
can write to david weaver who's the

685
00:27:35,269 --> 00:27:33,200
head of the office of communications and

686
00:27:37,870 --> 00:27:35,279
give us your ideas through that way

687
00:27:41,029 --> 00:27:37,880
there may be something on

688
00:27:43,350 --> 00:27:41,039

www.nasa.gov that can provide input

689

00:27:45,590 --> 00:27:43,360

but i would suggest

690

00:27:46,710 --> 00:27:45,600

for public relations

691

00:27:49,510 --> 00:27:46,720

why don't you

692

00:27:51,350 --> 00:27:49,520

connect with david weaver at nasa

693

00:27:58,149 --> 00:27:51,360

headquarters

694

00:28:04,230 --> 00:28:01,269

and my lovely assistant in my ear is

695

00:28:05,430 --> 00:28:04,240

telling me another way for you all to uh

696

00:28:06,389 --> 00:28:05,440

give us

697

00:28:09,269 --> 00:28:06,399

um

698

00:28:11,669 --> 00:28:09,279

some input and that is through email and

699

00:28:13,350 --> 00:28:11,679

what was that lovely assistance um what

700

00:28:19,110 --> 00:28:13,360

lovely assistant what was that

701
00:28:22,990 --> 00:28:20,230
public

702
00:28:24,549 --> 00:28:23,000
dash inquiries at

703
00:28:26,389 --> 00:28:24,559
nasa.gov

704
00:28:29,110 --> 00:28:26,399
so that's

705
00:28:36,070 --> 00:28:29,120
wait wait wait wait stand by public

706
00:28:41,350 --> 00:28:39,190
rewind okay

707
00:28:45,430 --> 00:28:41,360
help me people public

708
00:28:48,630 --> 00:28:45,440
dot dash public dash headquarter

709
00:28:52,230 --> 00:28:51,029
all right one more time with gusto

710
00:28:53,430 --> 00:28:52,240
public

711
00:28:55,669 --> 00:28:53,440
dash

712
00:28:56,870 --> 00:28:55,679
inquiries at

713
00:29:00,789 --> 00:28:56,880

hq

714

00:29:03,029 --> 00:29:00,799

dot nasa dot gov

715

00:29:04,310 --> 00:29:03,039

see how well this works okay

716

00:29:07,510 --> 00:29:04,320

um

717

00:29:08,630 --> 00:29:07,520

terrific well uh let's see

718

00:29:12,230 --> 00:29:08,640

um

719

00:29:14,950 --> 00:29:12,240

there is another question here

720

00:29:17,669 --> 00:29:14,960

um have we really talked about the

721

00:29:20,630 --> 00:29:17,679

prizes that are going to be happening

722

00:29:22,870 --> 00:29:20,640

for the people who are winners

723

00:29:24,789 --> 00:29:22,880

um i think we should you know because

724

00:29:27,110 --> 00:29:24,799

come on it is a competition

725

00:29:30,230 --> 00:29:27,120

exactly a winner should should be able

726

00:29:32,789 --> 00:29:30,240

to get something for their efforts

727

00:29:34,870 --> 00:29:32,799

um freddie or sarah do you want to talk

728

00:29:37,269 --> 00:29:34,880

about that or otherwise well

729

00:29:40,230 --> 00:29:37,279

we will

730

00:29:42,549 --> 00:29:40,240

well you know aside from the obvious

731

00:29:45,110 --> 00:29:42,559

price of of winning

732

00:29:47,750 --> 00:29:45,120

these awesome competitions we do have

733

00:29:50,149 --> 00:29:47,760

some physical prices as well um and

734

00:29:52,149 --> 00:29:50,159

they're they're they're pretty cool

735

00:29:54,789 --> 00:29:52,159

um for the

736

00:29:55,830 --> 00:29:54,799

inventing our future flight competition

737

00:29:59,430 --> 00:29:55,840

um

738

00:30:02,549 --> 00:29:59,440

the prizes with the winner will will get

739

00:30:03,350 --> 00:30:02,559

a lego trophy

740

00:30:05,590 --> 00:30:03,360

which

741

00:30:09,510 --> 00:30:05,600

is really really cool

742

00:30:11,350 --> 00:30:09,520

um a collection of commmorable nasa

743

00:30:12,470 --> 00:30:11,360

memorabilia

744

00:30:14,389 --> 00:30:12,480

um

745

00:30:15,909 --> 00:30:14,399

and a virtual presentation of the

746

00:30:19,190 --> 00:30:15,919

project nasa

747

00:30:21,350 --> 00:30:19,200

and lego specialists so that's you know

748

00:30:22,950 --> 00:30:21,360

a pretty awesome price i think

749

00:30:24,470 --> 00:30:22,960

um and for

750

00:30:26,710 --> 00:30:24,480

our um

751
00:30:30,710 --> 00:30:26,720
imagine our future beyond earth for that

752
00:30:30,720 --> 00:30:35,510
take that one

753
00:30:40,149 --> 00:30:37,510
sure i'll handle that i just had to

754
00:30:41,990 --> 00:30:40,159
unmute my microphone um

755
00:30:44,549 --> 00:30:42,000
this for this competition we are

756
00:30:46,630 --> 00:30:44,559
actually giving away a signed uh lego

757
00:30:48,870 --> 00:30:46,640
kusa hyobusa set

758
00:30:51,430 --> 00:30:48,880
which is a satellite that was launched

759
00:30:53,990 --> 00:30:51,440
into space in collaboration with nasa

760
00:30:56,310 --> 00:30:54,000
and a japanese agency

761
00:30:57,190 --> 00:30:56,320
and it's a lego model of the satellite

762
00:30:59,669 --> 00:30:57,200
we're not giving you the actual

763
00:31:03,190 --> 00:30:59,679

satellite um and we're also giving away

764

00:31:05,669 --> 00:31:03,200

the upcoming uh mars rover lego crusoe

765

00:31:07,269 --> 00:31:05,679

set so this is a brand new just an

766

00:31:10,710 --> 00:31:07,279

account set

767

00:31:13,269 --> 00:31:10,720

uh once it's available in early 2014

768

00:31:15,350 --> 00:31:13,279

that um was submitted by a fan and it

769

00:31:17,909 --> 00:31:15,360

looks just like the rover on mars right

770

00:31:20,870 --> 00:31:17,919

now and it's a it's a very very cool

771

00:31:22,950 --> 00:31:20,880

item very rare and exclusive

772

00:31:24,870 --> 00:31:22,960

and uh along with that we're also

773

00:31:28,070 --> 00:31:24,880

getting a collection of

774

00:31:30,230 --> 00:31:28,080

nasa memorabilia to go along with those

775

00:31:32,389 --> 00:31:30,240

those lego prizes

776

00:31:33,190 --> 00:31:32,399

and let me tell you that memorabilia

777

00:31:34,630 --> 00:31:33,200

is

778

00:31:37,350 --> 00:31:34,640

awesome

779

00:31:39,029 --> 00:31:37,360

i'll even i think i'll even throw in

780

00:31:40,870 --> 00:31:39,039

my last mission i'll throw in a couple

781

00:31:43,430 --> 00:31:40,880

of mission patches flown mission patches

782

00:31:44,549 --> 00:31:43,440

too for the winners how's that

783

00:31:47,590 --> 00:31:44,559

now

784

00:31:50,710 --> 00:31:47,600

breaking news they only have 4.9 million

785

00:31:52,389 --> 00:31:50,720

miles on them so it's not that far but

786

00:31:54,630 --> 00:31:52,399

yeah we're going to throw that into well

787

00:31:57,190 --> 00:31:54,640

that's awesome that is very generous of

788

00:32:00,149 --> 00:31:57,200

you leland awesome very cool breaking

789

00:32:01,909 --> 00:32:00,159

news breaking news here at the nasa

790

00:32:04,310 --> 00:32:01,919

google plus hangout

791

00:32:07,430 --> 00:32:04,320

for those of you who have joined us uh

792

00:32:10,789 --> 00:32:07,440

we're a little bit beyond midway

793

00:32:13,029 --> 00:32:10,799

um debbie rivera and i'm the lead for

794

00:32:16,310 --> 00:32:13,039

the nasa lego partnerships and we're

795

00:32:18,870 --> 00:32:16,320

here to talk about the nasa lego

796

00:32:20,389 --> 00:32:18,880

competition it's called nasa's missions

797

00:32:22,870 --> 00:32:20,399

imagine and build

798

00:32:24,950 --> 00:32:22,880

and uh it's currently open

799

00:32:26,870 --> 00:32:24,960

and running through

800

00:32:29,190 --> 00:32:26,880

july 31st

801
00:32:32,350 --> 00:32:29,200
we are here today to talk about the

802
00:32:35,110 --> 00:32:32,360
competition you can also check it out on

803
00:32:38,149 --> 00:32:35,120
rebrick.lego.com but let me introduce

804
00:32:40,870 --> 00:32:38,159
you to the folks here the team

805
00:32:43,269 --> 00:32:40,880
we have leland melvin who's head of the

806
00:32:47,350 --> 00:32:43,279
office of education and former

807
00:32:49,990 --> 00:32:47,360
chateau astronaut ccc and then we have

808
00:32:52,870 --> 00:32:50,000
april ladot who is the education

809
00:32:54,230 --> 00:32:52,880
einstein fellow here and she works in

810
00:33:00,630 --> 00:32:54,240
the

811
00:33:03,909 --> 00:33:00,640
we have some folks over in um legoland

812
00:33:07,110 --> 00:33:03,919
just kidding it's lego the lego group uh

813
00:33:10,149 --> 00:33:07,120

sarah moore we have in connecticut and

814

00:33:12,230 --> 00:33:10,159

we also have freddy hoff who is coming

815

00:33:14,630 --> 00:33:12,240

to us from denmark

816

00:33:15,990 --> 00:33:14,640

so welcome everybody who's just joining

817

00:33:18,789 --> 00:33:16,000

us

818

00:33:21,190 --> 00:33:18,799

one of the things that

819

00:33:23,430 --> 00:33:21,200

as i mentioned there is a nasa lego

820

00:33:25,750 --> 00:33:23,440

partnership and the competition is one

821

00:33:27,430 --> 00:33:25,760

of the things that we have done but

822

00:33:29,190 --> 00:33:27,440

something else that we have done and you

823

00:33:32,310 --> 00:33:29,200

can still

824

00:33:36,070 --> 00:33:32,320

engage with it and that is we

825

00:33:38,389 --> 00:33:36,080

and lego put lego bricks up on the

826

00:33:41,669 --> 00:33:38,399

international space station

827

00:33:44,070 --> 00:33:41,679

and up there the astronauts were able to

828

00:33:46,789 --> 00:33:44,080

show folks

829

00:33:49,590 --> 00:33:46,799

physics concepts and how things work in

830

00:33:52,389 --> 00:33:49,600

space versus on the ground and there's

831

00:33:54,669 --> 00:33:52,399

lots of cool video on it and you can

832

00:33:57,990 --> 00:33:54,679

take a look at that at

833

00:34:01,830 --> 00:33:58,000

legospace.com that's legospace.com

834

00:34:03,750 --> 00:34:01,840

and uh but we have somebody here who

835

00:34:06,149 --> 00:34:03,760

could actually talk to us about what the

836

00:34:09,349 --> 00:34:06,159

space station is all about and why it's

837

00:34:12,629 --> 00:34:09,359

important leland right so i flew on the

838

00:34:15,270 --> 00:34:12,639

space station in 2008 and 2009 and had

839

00:34:16,149 --> 00:34:15,280

the most incredible time we installed

840

00:34:20,710 --> 00:34:16,159

the

841

00:34:23,030 --> 00:34:20,720

space agency's big laboratory to do

842

00:34:24,790 --> 00:34:23,040

materials processing research to do

843

00:34:27,030 --> 00:34:24,800

human research

844

00:34:28,389 --> 00:34:27,040

you know physics on how the blood goes

845

00:34:30,230 --> 00:34:28,399

through your body your hearing your

846

00:34:32,149 --> 00:34:30,240

vision all these different things so if

847

00:34:34,550 --> 00:34:32,159

we go to mars one day we can use that

848

00:34:36,629 --> 00:34:34,560

that platform as a test bed to figure

849

00:34:38,310 --> 00:34:36,639

out how people will live on mars for up

850

00:34:40,550 --> 00:34:38,320

to a year and a half or so

851
00:34:43,349 --> 00:34:40,560
and so up on space station right now we

852
00:34:46,069 --> 00:34:43,359
have astronauts i think i posted a video

853
00:34:49,030 --> 00:34:46,079
on uh on twitter this morning

854
00:34:50,470 --> 00:34:49,040
of karen nyberg washing her hair you

855
00:34:51,430 --> 00:34:50,480
know how do you wash your hair now i

856
00:34:53,270 --> 00:34:51,440
didn't have that problem in space

857
00:34:54,310 --> 00:34:53,280
because you know i had kind of a low cut

858
00:34:55,909 --> 00:34:54,320
here but

859
00:34:58,550 --> 00:34:55,919
how how do you do these things these

860
00:34:59,829 --> 00:34:58,560
biological things in space and this this

861
00:35:01,589 --> 00:34:59,839
test bed is going to be the platform

862
00:35:02,710 --> 00:35:01,599
that helps us get to other planets one

863
00:35:03,430 --> 00:35:02,720

day

864

00:35:05,270 --> 00:35:03,440

so

865

00:35:06,230 --> 00:35:05,280

kevin ford who's one of my astronaut

866

00:35:08,310 --> 00:35:06,240

buddies

867

00:35:10,870 --> 00:35:08,320

took a mindstorms robotics kit and

868

00:35:13,430 --> 00:35:10,880

created a gyro in space

869

00:35:15,030 --> 00:35:13,440

and that gyro is similar to the control

870

00:35:17,510 --> 00:35:15,040

moment gyros there are four of them that

871

00:35:19,349 --> 00:35:17,520

are spinning that allow the station to

872

00:35:21,750 --> 00:35:19,359

be in a particular attitude or

873

00:35:24,069 --> 00:35:21,760

orientation so pitch yarn roll as it's

874

00:35:26,630 --> 00:35:24,079

going around the planet at 17 500 miles

875

00:35:28,790 --> 00:35:26,640

per hour every 90 minutes and so this is

876

00:35:32,150 --> 00:35:28,800

one of the things that we can see how

877

00:35:34,069 --> 00:35:32,160

these lego bricks work in space but how

878

00:35:36,230 --> 00:35:34,079

they would then work under a

879

00:35:37,270 --> 00:35:36,240

gravitational field on the planet and so

880

00:35:39,990 --> 00:35:37,280

we have

881

00:35:41,990 --> 00:35:40,000

education guides for for teachers for

882

00:35:43,190 --> 00:35:42,000

students to work with you can compare

883

00:35:44,950 --> 00:35:43,200

the difference so that as you're

884

00:35:47,430 --> 00:35:44,960

building your vehicles your future

885

00:35:49,190 --> 00:35:47,440

vehicles you have to think about how

886

00:35:51,270 --> 00:35:49,200

would this vehicle work

887

00:35:53,190 --> 00:35:51,280

in a zero-g environment and so those are

888

00:35:55,349 --> 00:35:53,200

some of the things that we use space

889

00:35:58,550 --> 00:35:55,359

station for to help us trick out how we

890

00:36:00,710 --> 00:35:58,560

would build vehicles build um

891

00:36:03,030 --> 00:36:00,720

you know hardware and also have people

892

00:36:04,550 --> 00:36:03,040

working and living on this platform and

893

00:36:05,589 --> 00:36:04,560

for future platforms

894

00:36:08,870 --> 00:36:05,599

awesome

895

00:36:11,910 --> 00:36:08,880

um and like i said uh the video of kevin

896

00:36:15,190 --> 00:36:11,920

doing that is on legospace.com so you

897

00:36:17,270 --> 00:36:15,200

can see him working with that lego gyro

898

00:36:19,750 --> 00:36:17,280

it's really cool so check that out so

899

00:36:22,150 --> 00:36:19,760

check that out okay great i'm going to

900

00:36:23,990 --> 00:36:22,160

go back to some questions we have one

901
00:36:26,310 --> 00:36:24,000
from facebook

902
00:36:29,829 --> 00:36:26,320
and this is probably a good one for our

903
00:36:35,109 --> 00:36:29,839
lego team and the question is how many

904
00:36:39,349 --> 00:36:37,190
so far we've only received a handful of

905
00:36:40,790 --> 00:36:39,359
entries but we're hopeful that there

906
00:36:41,829 --> 00:36:40,800
will be much more by the end of the

907
00:36:44,310 --> 00:36:41,839
month

908
00:36:45,990 --> 00:36:44,320
so that also means if you're looking to

909
00:36:49,829 --> 00:36:46,000
enter um

910
00:36:53,190 --> 00:36:51,750
so come one come all that's what she's

911
00:36:55,349 --> 00:36:53,200
saying okay

912
00:36:57,750 --> 00:36:55,359
and and remember uh it does take a

913
00:36:58,550 --> 00:36:57,760

little bit of time to put these together

914

00:37:01,829 --> 00:36:58,560

so

915

00:37:04,950 --> 00:37:01,839

we're really anticipating a lot to come

916

00:37:07,270 --> 00:37:04,960

in in the next 15 days so make sure your

917

00:37:10,230 --> 00:37:07,280

entry is one of them

918

00:37:12,230 --> 00:37:10,240

okay so now we're going i just wanna

919

00:37:15,030 --> 00:37:12,240

oh go ahead

920

00:37:18,069 --> 00:37:15,040

i just wanted to add that uh

921

00:37:19,910 --> 00:37:18,079

we have had to to to disqualify certain

922

00:37:22,790 --> 00:37:19,920

entries because they didn't follow the

923

00:37:24,470 --> 00:37:22,800

rules so make sure to to to read the

924

00:37:26,790 --> 00:37:24,480

rules and um

925

00:37:29,190 --> 00:37:26,800

you know so give yourself enough time

926
00:37:31,750 --> 00:37:29,200
for the entry so that you can fix if

927
00:37:33,270 --> 00:37:31,760
there is a if there is an issue

928
00:37:34,470 --> 00:37:33,280
but you didn't follow

929
00:37:37,109 --> 00:37:34,480
the

930
00:37:38,630 --> 00:37:37,119
official rules freddie i have a question

931
00:37:40,630 --> 00:37:38,640
for you if someone doesn't follow the

932
00:37:41,829 --> 00:37:40,640
rules will you notify them

933
00:37:42,950 --> 00:37:41,839
that there's a problem with their

934
00:37:43,910 --> 00:37:42,960
entities

935
00:37:45,270 --> 00:37:43,920
okay

936
00:37:46,710 --> 00:37:45,280
yes we will

937
00:37:49,190 --> 00:37:46,720
great so that's another reason to make

938
00:37:51,270 --> 00:37:49,200

sure you get it in on time and early so

939

00:37:53,430 --> 00:37:51,280

that they can catch those you know might

940

00:37:55,510 --> 00:37:53,440

be a small mistake but something that we

941

00:37:57,190 --> 00:37:55,520

just can't you know have with the

942

00:37:59,270 --> 00:37:57,200

contest so make sure you turn it in

943

00:38:01,270 --> 00:37:59,280

early

944

00:38:04,950 --> 00:38:01,280

okay time to get back to some more

945

00:38:08,150 --> 00:38:04,960

questions and uh the next one is a

946

00:38:10,230 --> 00:38:08,160

google plus from google plus and that is

947

00:38:13,190 --> 00:38:10,240

from and forgive me if i'm pronouncing

948

00:38:15,750 --> 00:38:13,200

your name wrong bun pensham

949

00:38:18,470 --> 00:38:15,760

and uh here's the question what do you

950

00:38:22,230 --> 00:38:18,480

want to see in this competition and do

951
00:38:24,870 --> 00:38:22,240

we get free lego parts

952
00:38:28,069 --> 00:38:24,880

i wish okay um

953
00:38:30,870 --> 00:38:28,079

anybody would like to take that question

954
00:38:32,390 --> 00:38:30,880

i'll take the first part and so what we

955
00:38:33,589 --> 00:38:32,400

want to see in the competition is we

956
00:38:36,630 --> 00:38:33,599

want to see

957
00:38:38,870 --> 00:38:36,640

ideas that are based on something that

958
00:38:40,069 --> 00:38:38,880

could possibly work in the future now

959
00:38:42,230 --> 00:38:40,079

like we said it doesn't have to be a

960
00:38:44,790 --> 00:38:42,240

working model but we do want to see that

961
00:38:46,710 --> 00:38:44,800

your entry fits in with what kinds of

962
00:38:49,030 --> 00:38:46,720

things we're working on so for example

963
00:38:50,790 --> 00:38:49,040

if you if you check out what uh what

964

00:38:52,470 --> 00:38:50,800

nasa is working on for aeronautics and

965

00:38:53,829 --> 00:38:52,480

you can do that right off of the nasa

966

00:38:56,150 --> 00:38:53,839

site or you can also go to

967

00:38:57,589 --> 00:38:56,160

aeronautics.nasa.gov

968

00:38:59,109 --> 00:38:57,599

what you'll find is that what we're

969

00:39:01,910 --> 00:38:59,119

trying to do is we're trying to help

970

00:39:04,710 --> 00:39:01,920

airplanes fly safer we're helping that

971

00:39:06,310 --> 00:39:04,720

we want them to fly faster we want less

972

00:39:07,990 --> 00:39:06,320

fuel emissions

973

00:39:09,990 --> 00:39:08,000

but we need them all to be able to work

974

00:39:12,069 --> 00:39:10,000

together and be able to fly in the same

975

00:39:13,670 --> 00:39:12,079

air space so we need them to

976

00:39:16,230 --> 00:39:13,680

we need them to function well with one

977

00:39:18,390 --> 00:39:16,240

another so when we talk about that we

978

00:39:20,630 --> 00:39:18,400

want to see that you have a great idea

979

00:39:22,950 --> 00:39:20,640

but you have a great idea that you think

980

00:39:24,630 --> 00:39:22,960

would fit with what kinds of things are

981

00:39:27,349 --> 00:39:24,640

actually in existence and could

982

00:39:29,910 --> 00:39:27,359

realistically you know be placed into

983

00:39:32,230 --> 00:39:29,920

you know into our future aeronautics and

984

00:39:33,510 --> 00:39:32,240

same with the with the space component

985

00:39:36,310 --> 00:39:33,520

as well there's a little more

986

00:39:37,910 --> 00:39:36,320

flexibility in the the space competition

987

00:39:40,230 --> 00:39:37,920

because when you're sending it out there

988

00:39:42,470 --> 00:39:40,240

you're not necessarily coordinating with

989

00:39:44,550 --> 00:39:42,480

with other spacecraft once you get out

990

00:39:46,390 --> 00:39:44,560

past earth's orbit you can

991

00:39:47,990 --> 00:39:46,400

pretty much go wherever you need to go

992

00:39:49,589 --> 00:39:48,000

but when we talk but you may have a

993

00:39:51,270 --> 00:39:49,599

constellation of spacecraft going out to

994

00:39:53,510 --> 00:39:51,280

do a mission exactly and that's a

995

00:39:55,910 --> 00:39:53,520

possibility too yeah and as we go and

996

00:39:58,470 --> 00:39:55,920

looking at retrieving an asteroid how do

997

00:39:59,990 --> 00:39:58,480

we build a vehicle that uses solar

998

00:40:01,990 --> 00:40:00,000

electric propulsion that's one of the

999

00:40:04,390 --> 00:40:02,000

things that we're looking at doing right

1000

00:40:06,710 --> 00:40:04,400

now to to give us a propulsion system

1001
00:40:08,870 --> 00:40:06,720
that can get us out there grab the

1002
00:40:11,190 --> 00:40:08,880
asteroid bring it back to cislunar orbit

1003
00:40:13,030 --> 00:40:11,200
so that we can send astronauts on orion

1004
00:40:14,790 --> 00:40:13,040
up there to actually mine the asteroid

1005
00:40:17,670 --> 00:40:14,800
and think about how we can protect our

1006
00:40:20,950 --> 00:40:17,680
planet in case like on my birthday uh

1007
00:40:23,510 --> 00:40:20,960
february 15th this past year there was a

1008
00:40:25,430 --> 00:40:23,520
meteorite that hit in russia that could

1009
00:40:27,270 --> 00:40:25,440
have caused much more damage than it did

1010
00:40:29,430 --> 00:40:27,280
so we want to be able to look out there

1011
00:40:31,750 --> 00:40:29,440
and see if there's something coming

1012
00:40:33,430 --> 00:40:31,760
towards us that we can actually mitigate

1013
00:40:35,510 --> 00:40:33,440

or move out into a different orbit so

1014

00:40:37,270 --> 00:40:35,520

that it doesn't impact the planet and

1015

00:40:38,630 --> 00:40:37,280

take out our civilization so those are

1016

00:40:41,510 --> 00:40:38,640

some of the things that we're looking at

1017

00:40:42,710 --> 00:40:41,520

doing at nasa to ensure that we are have

1018

00:40:44,630 --> 00:40:42,720

a future

1019

00:40:46,390 --> 00:40:44,640

and that's about building the future

1020

00:40:48,390 --> 00:40:46,400

exactly imagining and building the

1021

00:40:49,589 --> 00:40:48,400

future imagining that's right this is

1022

00:40:52,310 --> 00:40:49,599

what we're talking about at this

1023

00:40:54,230 --> 00:40:52,320

competition aren't we um but the second

1024

00:40:57,670 --> 00:40:54,240

part of that question was about the free

1025

00:41:00,230 --> 00:40:57,680

lego bricks and before we have our lego

1026
00:41:02,710 --> 00:41:00,240
folks answer that question there another

1027
00:41:05,349 --> 00:41:02,720
question came in that has a little bit

1028
00:41:07,829 --> 00:41:05,359
to do with that as well so i'm gonna i'm

1029
00:41:10,950 --> 00:41:07,839
gonna throw that question out as

1030
00:41:12,550 --> 00:41:10,960
to our lego folks and um it's through

1031
00:41:14,790 --> 00:41:12,560
the google plus

1032
00:41:21,430 --> 00:41:14,800
where can i go

1033
00:41:25,349 --> 00:41:21,440
competition online and that may um

1034
00:41:29,030 --> 00:41:25,359
be part of your answer freddie or sarah

1035
00:41:30,390 --> 00:41:29,040
yeah so regarding free lego bricks um

1036
00:41:32,630 --> 00:41:30,400
we don't we aren't really giving those

1037
00:41:35,510 --> 00:41:32,640
away unless you count the prizes for the

1038
00:41:37,990 --> 00:41:35,520

competition which do include

1039

00:41:39,750 --> 00:41:38,000

lego bricks but if the concern is

1040

00:41:41,430 --> 00:41:39,760

whether or not you don't have bricks to

1041

00:41:44,309 --> 00:41:41,440

build a model with

1042

00:41:46,230 --> 00:41:44,319

uh we recommend entering the

1043

00:41:49,030 --> 00:41:46,240

inventing the future flight competition

1044

00:41:51,829 --> 00:41:49,040

since that competition is open for a

1045

00:41:52,870 --> 00:41:51,839

digital model to be created and the

1046

00:41:54,230 --> 00:41:52,880

software that you would use is

1047

00:41:56,790 --> 00:41:54,240

completely free provided by the lego

1048

00:41:59,589 --> 00:41:56,800

group called lego digital designer and

1049

00:42:01,910 --> 00:41:59,599

to download that to build your proto

1050

00:42:04,230 --> 00:42:01,920

type you can actually go to rebrick.com

1051
00:42:05,430 --> 00:42:04,240
and click the banner and go through to

1052
00:42:06,870 --> 00:42:05,440
the imagine

1053
00:42:08,470 --> 00:42:06,880
inventing the future of flight

1054
00:42:10,230 --> 00:42:08,480
competition you can also just try

1055
00:42:12,150 --> 00:42:10,240
searching for it and that should take

1056
00:42:15,510 --> 00:42:12,160
you to the direct download page on

1057
00:42:21,109 --> 00:42:18,150
awesome yeah i'm a i'm a mac user does

1058
00:42:22,950 --> 00:42:21,119
it work on a mac also mac npcs

1059
00:42:24,550 --> 00:42:22,960
i believe so yes

1060
00:42:27,190 --> 00:42:24,560
okay it does

1061
00:42:30,870 --> 00:42:27,200
so i want to build my bill tonight

1062
00:42:32,230 --> 00:42:30,880
well speaking of uh microsoft and the

1063
00:42:34,790 --> 00:42:32,240

mac

1064

00:42:39,190 --> 00:42:34,800

believe it or not we have a question

1065

00:42:44,309 --> 00:42:41,349

no live b gates

1066

00:42:47,589 --> 00:42:44,319

from google plus and here's what b gates

1067

00:42:50,069 --> 00:42:47,599

wants to know does it have to be a plane

1068

00:42:51,349 --> 00:42:50,079

or rocket or can it be a lander or a

1069

00:42:53,349 --> 00:42:51,359

satellite

1070

00:42:55,349 --> 00:42:53,359

oh good question april would you like to

1071

00:42:57,750 --> 00:42:55,359

take that i sure will

1072

00:42:59,750 --> 00:42:57,760

so it can be pretty much anything you

1073

00:43:01,270 --> 00:42:59,760

can think of so the aircraft is

1074

00:43:03,829 --> 00:43:01,280

obviously something that would that

1075

00:43:05,510 --> 00:43:03,839

would fly in earth's atmosphere but no

1076

00:43:08,069 --> 00:43:05,520

it doesn't have to be it can be a

1077

00:43:10,790 --> 00:43:08,079

satellite a lander of rocket you could

1078

00:43:13,430 --> 00:43:10,800

even build a lunar outpost or anything

1079

00:43:14,870 --> 00:43:13,440

that's gonna take us out past earth's

1080

00:43:16,630 --> 00:43:14,880

orbit so it doesn't have to be a

1081

00:43:18,550 --> 00:43:16,640

transportation

1082

00:43:20,550 --> 00:43:18,560

device unless it's the aircraft that's

1083

00:43:23,270 --> 00:43:20,560

the only one that has to be a you know a

1084

00:43:24,950 --> 00:43:23,280

vehicle but in terms of the space the

1085

00:43:27,430 --> 00:43:24,960

space one it can be anything you can

1086

00:43:30,470 --> 00:43:27,440

imagine that belongs out past earth's

1087

00:43:33,109 --> 00:43:30,480

orbit so great question

1088

00:43:34,950 --> 00:43:33,119

thank you b gates um we have we have

1089

00:43:37,030 --> 00:43:34,960

several more but i just want to make

1090

00:43:40,309 --> 00:43:37,040

sure that the folks who have just joined

1091

00:43:43,270 --> 00:43:40,319

us realize that we are talking about the

1092

00:43:45,750 --> 00:43:43,280

nasa lego competition called a nasa's

1093

00:43:47,990 --> 00:43:45,760

missions imagine a build i'm debbie

1094

00:43:50,470 --> 00:43:48,000

rivera head of the nasa lego

1095

00:43:52,150 --> 00:43:50,480

partnerships with me today is leland

1096

00:43:53,990 --> 00:43:52,160

melvin head of our

1097

00:43:56,630 --> 00:43:54,000

education office here at nasa and we

1098

00:43:58,710 --> 00:43:56,640

have april lanat and she's one of our

1099

00:44:02,550 --> 00:43:58,720

education einstein fellows who works in

1100

00:44:05,190 --> 00:44:02,560

the aeronautics area we also have um our

1101

00:44:06,550 --> 00:44:05,200

lego folks and that is

1102

00:44:08,710 --> 00:44:06,560

sarah moore

1103

00:44:11,589 --> 00:44:08,720

she's here with us in the united states

1104

00:44:15,430 --> 00:44:11,599

in connecticut as well as freddie hoff

1105

00:44:17,829 --> 00:44:15,440

from denmark okay we have only about

1106

00:44:19,910 --> 00:44:17,839

maybe 12 minutes left so i really want

1107

00:44:22,790 --> 00:44:19,920

to get these questions good questions in

1108

00:44:25,990 --> 00:44:22,800

come on come on

1109

00:44:28,870 --> 00:44:26,000

all right from um google plus peter is

1110

00:44:32,710 --> 00:44:28,880

asking can you elaborate on inspired

1111

00:44:35,270 --> 00:44:32,720

originality what does that really mean

1112

00:44:37,190 --> 00:44:35,280

sure i can do that one go april

1113

00:44:38,630 --> 00:44:37,200

so so one of the things that we want to

1114

00:44:40,550 --> 00:44:38,640

do is we want to see what you can come

1115

00:44:41,589 --> 00:44:40,560

up with on your own however like i just

1116

00:44:44,309 --> 00:44:41,599

said

1117

00:44:46,230 --> 00:44:44,319

we want we want models that fit in with

1118

00:44:48,069 --> 00:44:46,240

uh with what we're doing right now so

1119

00:44:50,230 --> 00:44:48,079

for example if you take a look at what

1120

00:44:53,430 --> 00:44:50,240

aeronautics is working on we're working

1121

00:44:55,829 --> 00:44:53,440

on aircraft that fly perhaps faster than

1122

00:44:58,390 --> 00:44:55,839

the speed of sound we're looking at

1123

00:45:00,230 --> 00:44:58,400

new model new shapes we have lots of

1124

00:45:02,309 --> 00:45:00,240

composite structures and so we're able

1125

00:45:04,550 --> 00:45:02,319

to come up with new designs but we want

1126
00:45:06,630 --> 00:45:04,560
to know that your model that your design

1127
00:45:08,230 --> 00:45:06,640
would fit into what's going on what's

1128
00:45:10,470 --> 00:45:08,240
really going on so when we talk about

1129
00:45:12,870 --> 00:45:10,480
inspired what we really mean is more in

1130
00:45:14,710 --> 00:45:12,880
a way almost informed creativity so we

1131
00:45:16,790 --> 00:45:14,720
want to know that you have an idea of

1132
00:45:19,190 --> 00:45:16,800
what's going on in the first place and

1133
00:45:20,950 --> 00:45:19,200
how your design can fit in with what's

1134
00:45:22,470 --> 00:45:20,960
already going on so we want you to be

1135
00:45:24,630 --> 00:45:22,480
creative we don't want you to build what

1136
00:45:26,710 --> 00:45:24,640
we've already built but we want it to

1137
00:45:28,470 --> 00:45:26,720
fit in with everything else we're doing

1138
00:45:30,630 --> 00:45:28,480

and where you can get that information

1139

00:45:33,750 --> 00:45:30,640

about what nasa is doing again is on w

1140

00:45:37,109 --> 00:45:34,870

okay

1141

00:45:40,550 --> 00:45:37,119

we have another question

1142

00:45:43,030 --> 00:45:40,560

what if you build your model how do you

1143

00:45:46,470 --> 00:45:43,040

you send it in as a physical model or do

1144

00:45:49,670 --> 00:45:46,480

you use pictures or how how do you do

1145

00:45:54,550 --> 00:45:49,680

the entry application

1146

00:45:58,390 --> 00:45:56,470

do they post that one

1147

00:46:00,390 --> 00:45:58,400

okay yes

1148

00:46:02,710 --> 00:46:00,400

okay great

1149

00:46:04,150 --> 00:46:02,720

go ahead um what you do is you actually

1150

00:46:05,190 --> 00:46:04,160

um you

1151

00:46:06,150 --> 00:46:05,200

put the

1152

00:46:07,510 --> 00:46:06,160

um

1153

00:46:09,589 --> 00:46:07,520

you submit it to rebrick which is a

1154

00:46:11,109 --> 00:46:09,599

social bookmarking website which means

1155

00:46:13,430 --> 00:46:11,119

that you have to pretty much submit your

1156

00:46:15,829 --> 00:46:13,440

photo onto an image hosting platform

1157

00:46:17,589 --> 00:46:15,839

such as flickr or photobucket and then

1158

00:46:18,870 --> 00:46:17,599

bookmark it is what we call it when you

1159

00:46:20,630 --> 00:46:18,880

submit a link

1160

00:46:23,270 --> 00:46:20,640

directly onto rebrick within the

1161

00:46:24,710 --> 00:46:23,280

building challenge category that way we

1162

00:46:26,829 --> 00:46:24,720

know you're entering the competition and

1163

00:46:28,470 --> 00:46:26,839

we can evaluate it

1164

00:46:31,109 --> 00:46:28,480

properly

1165

00:46:33,270 --> 00:46:31,119

it's uh it's all described in the rules

1166

00:46:35,670 --> 00:46:33,280

and i think one of the things is a key

1167

00:46:38,390 --> 00:46:35,680

factor is that to to make sure you get a

1168

00:46:40,790 --> 00:46:38,400

good image so when you take a photo of

1169

00:46:43,829 --> 00:46:40,800

of the the creation that you build make

1170

00:46:46,069 --> 00:46:43,839

sure to to have the lighting right and

1171

00:46:50,069 --> 00:46:46,079

and to take a picture that really shows

1172

00:46:53,030 --> 00:46:50,079

off the best of what you build

1173

00:46:56,470 --> 00:46:53,040

terrific and again that uh the rules and

1174

00:46:57,829 --> 00:46:56,480

all the how to's are on www

1175

00:47:00,510 --> 00:46:57,839

well i don't even think you do do the

1176

00:47:02,630 --> 00:47:00,520

w's anymore it's

1177

00:47:04,309 --> 00:47:02,640

rebrick.lego.com okay that's where you

1178

00:47:06,069 --> 00:47:04,319

can get that information

1179

00:47:08,630 --> 00:47:06,079

okay moving on

1180

00:47:09,589 --> 00:47:08,640

trenton through google plus would like

1181

00:47:14,390 --> 00:47:09,599

to know

1182

00:47:19,589 --> 00:47:17,990

is there is there a limit uh freddie

1183

00:47:20,550 --> 00:47:19,599

yes

1184

00:47:23,589 --> 00:47:20,560

okay

1185

00:47:26,069 --> 00:47:23,599

so you can only submit one entry per

1186

00:47:29,990 --> 00:47:26,079

contest

1187

00:47:32,309 --> 00:47:30,000

so that means one by the end of july 15

1188

00:47:35,750 --> 00:47:32,319

for the competition called nasa's

1189

00:47:36,829 --> 00:47:35,760

missions imagine and build okay great

1190

00:47:41,190 --> 00:47:36,839

and

1191

00:47:43,670 --> 00:47:41,200

um viducci from google plus is asking

1192

00:47:45,829 --> 00:47:43,680

can we participate solo

1193

00:47:48,230 --> 00:47:45,839

or do you have to be in a team

1194

00:47:50,630 --> 00:47:48,240

and uh leland what do you think

1195

00:47:52,950 --> 00:47:50,640

i think you can either go solo if you

1196

00:47:55,829 --> 00:47:52,960

want to or you can be part of a team i

1197

00:47:57,589 --> 00:47:55,839

think up to five people on the team and

1198

00:47:59,030 --> 00:47:57,599

if you get a team bigger than five then

1199

00:48:00,950 --> 00:47:59,040

you have to break it off and create two

1200

00:48:03,430 --> 00:48:00,960

teams i think that's what april told me

1201

00:48:05,270 --> 00:48:03,440

earlier so uh but but just be very

1202

00:48:06,630 --> 00:48:05,280

creative and if if you have maybe one

1203

00:48:07,990 --> 00:48:06,640

person working on one part of the

1204

00:48:10,390 --> 00:48:08,000

vehicle one person working on another

1205

00:48:13,030 --> 00:48:10,400

part you can combine those efforts to

1206

00:48:15,190 --> 00:48:13,040

make this super super really cool uh

1207

00:48:17,270 --> 00:48:15,200

design that we're gonna

1208

00:48:18,390 --> 00:48:17,280

give you some thumbs up for

1209

00:48:23,030 --> 00:48:18,400

awesome

1210

00:48:24,390 --> 00:48:23,040

so with that tammy from google plus says

1211

00:48:27,030 --> 00:48:24,400

or asks

1212

00:48:28,790 --> 00:48:27,040

are there going to be new lego products

1213

00:48:30,630 --> 00:48:28,800

or kits that come out of this

1214

00:48:32,950 --> 00:48:30,640

competition

1215

00:48:36,230 --> 00:48:32,960

ready

1216

00:48:39,349 --> 00:48:36,240

um well that's interesting um

1217

00:48:40,150 --> 00:48:39,359

this is not something that we

1218

00:48:42,630 --> 00:48:40,160

are

1219

00:48:44,390 --> 00:48:42,640

planning on at this point but

1220

00:48:45,910 --> 00:48:44,400

i'll have to say that you never know

1221

00:48:48,950 --> 00:48:45,920

what's going to happen

1222

00:48:50,950 --> 00:48:48,960

so um you know if something is is is

1223

00:48:53,109 --> 00:48:50,960

amazing that's obviously worth

1224

00:48:55,510 --> 00:48:53,119

considering

1225

00:48:57,030 --> 00:48:55,520

and we would of course work sorry we'd

1226

00:48:59,109 --> 00:48:57,040

of course work closely with uh the

1227

00:49:03,190 --> 00:48:59,119

person who submitted the design if we

1228

00:49:05,349 --> 00:49:03,200

chose to pursue to pursue that path

1229

00:49:08,069 --> 00:49:05,359

exactly now let me ask you all a

1230

00:49:11,510 --> 00:49:08,079

question then uh from the studio debbie

1231

00:49:14,549 --> 00:49:11,520

rivera question um can the winner of

1232

00:49:16,710 --> 00:49:14,559

this competition put their model on the

1233

00:49:18,309 --> 00:49:16,720

kuzo site

1234

00:49:19,829 --> 00:49:18,319

absolutely there's abs there's no

1235

00:49:22,470 --> 00:49:19,839

problem with that and for those who

1236

00:49:23,990 --> 00:49:22,480

don't know about lego cuso it's a

1237

00:49:25,990 --> 00:49:24,000

platform where you can it's a

1238

00:49:28,790 --> 00:49:26,000

crowdsourcing platform where users can

1239

00:49:31,990 --> 00:49:28,800

submit ideas from new lego sets and if

1240

00:49:33,829 --> 00:49:32,000

an idea reaches 10 000 supporters um it

1241

00:49:35,990 --> 00:49:33,839

will be considered for a potential lego

1242

00:49:39,829 --> 00:49:36,000

set and that's actually how the two

1243

00:49:42,630 --> 00:49:39,839

prizes for the um imagine our future

1244

00:49:44,710 --> 00:49:42,640

beyond earth competition um came from

1245

00:49:46,390 --> 00:49:44,720

the hayabusa and the mars rover were

1246

00:49:48,069 --> 00:49:46,400

submitted by a fan

1247

00:49:51,349 --> 00:49:48,079

and are now

1248

00:49:52,309 --> 00:49:51,359

in the process of becoming sets

1249

00:49:55,589 --> 00:49:52,319

awesome

1250

00:49:57,430 --> 00:49:55,599

and i think the goal of the of the fans

1251
00:50:01,349 --> 00:49:57,440
and the students and everyone out there

1252
00:50:04,390 --> 00:50:01,359
is to just blow lego's socks off

1253
00:50:05,829 --> 00:50:04,400
and you know your inventive creative you

1254
00:50:07,109 --> 00:50:05,839
know design

1255
00:50:09,190 --> 00:50:07,119
may make them want to call you right

1256
00:50:12,150 --> 00:50:09,200
away once they see it so you know use

1257
00:50:14,069 --> 00:50:12,160
your brains be creative be so you know

1258
00:50:17,109 --> 00:50:14,079
have some really cool stuff that they

1259
00:50:19,589 --> 00:50:17,119
won't want to turn you down okay

1260
00:50:21,109 --> 00:50:19,599
and that is definitely uh something to

1261
00:50:24,710 --> 00:50:21,119
remember for sure

1262
00:50:27,750 --> 00:50:24,720
um another uh question came in uh from

1263
00:50:30,710 --> 00:50:27,760

this time youtube and it is does it

1264

00:50:33,030 --> 00:50:30,720

matter if you are not american to enter

1265

00:50:34,549 --> 00:50:33,040

this competition

1266

00:50:35,829 --> 00:50:34,559

and sarah would you like to answer that

1267

00:50:38,150 --> 00:50:35,839

one for us

1268

00:50:39,910 --> 00:50:38,160

sure um that does not matter at all uh

1269

00:50:41,829 --> 00:50:39,920

we we talked to someone earlier who's

1270

00:50:43,190 --> 00:50:41,839

interested in entering from mexico and

1271

00:50:45,190 --> 00:50:43,200

that is

1272

00:50:47,109 --> 00:50:45,200

most countries unless it's already

1273

00:50:48,710 --> 00:50:47,119

unless it's prohibited there by law um

1274

00:50:50,710 --> 00:50:48,720

it's completely fine to enter and you

1275

00:50:53,190 --> 00:50:50,720

can find a list of the few countries

1276

00:50:55,190 --> 00:50:53,200

where there might be complications in

1277

00:51:00,150 --> 00:50:55,200

the rules by going to rebrick.com and

1278

00:51:05,349 --> 00:51:01,910

cool that's very good

1279

00:51:07,750 --> 00:51:05,359

okay and here is uh another question

1280

00:51:10,950 --> 00:51:07,760

from google plus and that is where did

1281

00:51:13,670 --> 00:51:10,960

the idea of using lego to construct

1282

00:51:16,710 --> 00:51:13,680

models for nasa come from

1283

00:51:17,670 --> 00:51:16,720

great question and that has come from

1284

00:51:24,549 --> 00:51:17,680

the

1285

00:51:26,870 --> 00:51:24,559

years

1286

00:51:28,870 --> 00:51:26,880

nasa and lego came together maybe about

1287

00:51:29,750 --> 00:51:28,880

five years ago i think with our very

1288

00:51:32,150 --> 00:51:29,760

first

1289

00:51:34,950 --> 00:51:32,160

agreement to form a partnership and

1290

00:51:37,510 --> 00:51:34,960

we've done a myriad of things

1291

00:51:39,030 --> 00:51:37,520

from that time we've talked about one of

1292

00:51:41,270 --> 00:51:39,040

them which is

1293

00:51:45,190 --> 00:51:41,280

putting lego bricks up on the space

1294

00:51:47,190 --> 00:51:45,200

station where astronauts can use them to

1295

00:51:49,349 --> 00:51:47,200

talk about physics

1296

00:51:52,069 --> 00:51:49,359

and other things that just can't happen

1297

00:51:53,670 --> 00:51:52,079

on earth and then this competition is

1298

00:51:54,630 --> 00:51:53,680

just another way

1299

00:51:55,670 --> 00:51:54,640

to

1300

00:51:57,670 --> 00:51:55,680

again

1301

00:51:59,910 --> 00:51:57,680

give an opportunity for both

1302

00:52:01,910 --> 00:51:59,920

organizations to have a mutually

1303

00:52:04,309 --> 00:52:01,920

exclusive i mean

1304

00:52:07,109 --> 00:52:04,319

a mutually beneficial mutually

1305

00:52:09,829 --> 00:52:07,119

beneficial type of

1306

00:52:12,790 --> 00:52:09,839

outcome for the projects that we do

1307

00:52:14,390 --> 00:52:12,800

so it's a team approach from both nasa

1308

00:52:15,589 --> 00:52:14,400

and lego

1309

00:52:18,710 --> 00:52:15,599

okay

1310

00:52:21,349 --> 00:52:18,720

we have one time for one more question

1311

00:52:23,990 --> 00:52:21,359

do we have one more question cindy my

1312

00:52:26,390 --> 00:52:24,000

assistant off camera who is blushing

1313

00:52:29,670 --> 00:52:26,400

again okay

1314

00:52:32,710 --> 00:52:29,680

all right well if we don't that's okay

1315

00:52:36,710 --> 00:52:32,720

um i just want to um

1316

00:52:39,829 --> 00:52:36,720

remind everybody that uh we have

1317

00:52:42,549 --> 00:52:39,839

done this google plus hangout so that we

1318

00:52:45,030 --> 00:52:42,559

can talk about the upcoming well

1319

00:52:47,190 --> 00:52:45,040

actually it's ongoing the nasa missions

1320

00:52:50,790 --> 00:52:47,200

imagine and build competition

1321

00:52:54,710 --> 00:52:50,800

it is open and it is going to end on

1322

00:52:58,069 --> 00:52:54,720

july 31st uh that means there's only 15

1323

00:53:00,630 --> 00:52:58,079

more days before you can get an entry in

1324

00:53:02,870 --> 00:53:00,640

if you guys go to

1325

00:53:05,270 --> 00:53:02,880

rebrick.lego.com

1326

00:53:08,069 --> 00:53:05,280

you can get all the information the

1327

00:53:09,750 --> 00:53:08,079

competition rules what we're looking for

1328

00:53:11,670 --> 00:53:09,760

what the prizes are going to be so

1329

00:53:13,990 --> 00:53:11,680

please do that

1330

00:53:17,430 --> 00:53:14,000

as april has said you know what we're

1331

00:53:19,430 --> 00:53:17,440

looking for is really informed designs

1332

00:53:21,030 --> 00:53:19,440

and in order to have informed designs

1333

00:53:23,829 --> 00:53:21,040

what do we have to do we have to know

1334

00:53:26,390 --> 00:53:23,839

what nasa does exactly we've got to know

1335

00:53:29,349 --> 00:53:26,400

you got to know so you can find out more

1336

00:53:32,710 --> 00:53:29,359

about the nasa missions whether it's

1337

00:53:35,750 --> 00:53:32,720

space related like uh leland has been

1338

00:53:38,230 --> 00:53:35,760

had the opportunity to be in space

1339

00:53:41,190 --> 00:53:38,240

and um or if it's uh

1340

00:53:42,390 --> 00:53:41,200

doing the aeronautic uh aspect of the

1341

00:53:46,309 --> 00:53:42,400

competition

1342

00:53:48,790 --> 00:53:46,319

but check us out on www.nasa.gov

1343

00:53:49,750 --> 00:53:48,800

for that kind of information

1344

00:53:52,069 --> 00:53:49,760

um

1345

00:53:54,309 --> 00:53:52,079

debbie can i add one quick thing as well

1346

00:53:57,750 --> 00:53:54,319

yes of course april so if you have more

1347

00:53:59,670 --> 00:53:57,760

questions the rebrick.lego.com

1348

00:54:01,750 --> 00:53:59,680

site you can actually ask questions so

1349

00:54:03,670 --> 00:54:01,760

after we're finished today if you think

1350

00:54:05,109 --> 00:54:03,680

of some questions that you forgot to ask

1351

00:54:07,349 --> 00:54:05,119

or you go to the site and you still have

1352

00:54:09,109 --> 00:54:07,359

some questions uh just post them there

1353

00:54:11,030 --> 00:54:09,119

and then they can be answered so don't

1354

00:54:13,430 --> 00:54:11,040

worry this isn't your last chance to ask

1355

00:54:15,030 --> 00:54:13,440

any questions all right great and also

1356

00:54:16,910 --> 00:54:15,040

if you want to learn more about nasa

1357

00:54:18,710 --> 00:54:16,920

education go to

1358

00:54:20,870 --> 00:54:18,720

www.nasa.gov

1359

00:54:22,630 --> 00:54:20,880

education where you can see other

1360

00:54:24,309 --> 00:54:22,640

activities that you can do along with

1361

00:54:26,390 --> 00:54:24,319

this competition

1362

00:54:28,549 --> 00:54:26,400

whether it's building rockets or this

1363

00:54:30,069 --> 00:54:28,559

exploration design challenge and it's

1364

00:54:31,430 --> 00:54:30,079

for teachers it's for students it's for

1365

00:54:34,630 --> 00:54:31,440

grandparents it's for the whole k

1366

00:54:36,829 --> 00:54:34,640

through gray so check out nasa.gov

1367

00:54:41,589 --> 00:54:36,839

education

1368

00:54:45,430 --> 00:54:41,599

activities you can do

1369

00:54:49,910 --> 00:54:45,440

great um and uh freddie or sarah would

1370

00:54:56,710 --> 00:54:52,950

well just remember that um

1371

00:54:57,910 --> 00:54:56,720

you have 15 days so um get building it's

1372

00:55:00,549 --> 00:54:57,920

uh it's

1373

00:55:03,990 --> 00:55:00,559

two very very cool competitions go to

1374

00:55:06,950 --> 00:55:04,000

rebrick.com to to see all the rules and

1375

00:55:08,549 --> 00:55:06,960

as april just said um you can ask

1376

00:55:10,630 --> 00:55:08,559

questions there if there's anything you

1377

00:55:13,430 --> 00:55:10,640

find that's not answered in in

1378

00:55:15,910 --> 00:55:13,440

in the rules so um you can write and

1379

00:55:19,589 --> 00:55:15,920

either sarah or i will get back to you

1380

00:55:21,510 --> 00:55:19,599

um explaining those exact rules so

1381

00:55:22,710 --> 00:55:21,520

start building

1382

00:55:26,870 --> 00:55:22,720

because we

1383

00:55:29,349 --> 00:55:26,880

high

1384

00:55:30,390 --> 00:55:29,359

all right thanks very much for um being