



Marathon triathlon

17

17

17

1  
00:00:00,000 --> 00:00:01,972  
[MUSIC PLAYING]

2  
00:00:04,440 --> 00:00:11,610  
Hands- on, competitive,  
rewarding--

3  
00:00:11,610 --> 00:00:14,020  
NASA's Human Exploration  
Rover challenge

4  
00:00:14,020 --> 00:00:16,780  
can't be described  
in just one word.

5  
00:00:16,780 --> 00:00:20,050  
And while it has evolved  
over the past two decades,

6  
00:00:20,050 --> 00:00:22,340  
its original premise  
remains the same.

7  
00:00:22,340 --> 00:00:25,760  
Students design and build  
human-powered rovers

8  
00:00:25,760 --> 00:00:28,960  
to race on a simulated  
extraterrestrial obstacle

9  
00:00:28,960 --> 00:00:29,860  
course.

10  
00:00:29,860 --> 00:00:33,040  
The course is not for the  
faint of heart, designed

11  
00:00:33,040 --> 00:00:35,800

to mimic the types of  
terrain potentially found

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00:00:35,800 --> 00:00:39,700

on the moon, Mars, or  
other distant destinations

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00:00:39,700 --> 00:00:41,530

astronauts will soon explore.

14

00:00:41,530 --> 00:00:45,410

Each year, hundreds of students  
from high schools, colleges,

15

00:00:45,410 --> 00:00:47,620

and universities  
around the world

16

00:00:47,620 --> 00:00:51,240

just like you begin an  
eight to 10-month journey,

17

00:00:51,240 --> 00:00:53,680

one that will take them  
through the engineering design

18

00:00:53,680 --> 00:00:57,220

process and all the way  
to the US Space and Rocket

19

00:00:57,220 --> 00:01:00,700

Center, the official visitors  
center for NASA's Marshall

20

00:01:00,700 --> 00:01:01,930

Space Flight Center.

21

00:01:01,930 --> 00:01:05,170

Teams begin their journey by  
demonstrating their abilities

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00:01:05,170 --> 00:01:08,870

in computer and mechanical  
engineering, computer modeling,

23

00:01:08,870 --> 00:01:12,430

fabrication, welding,  
and 3D printing.

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00:01:12,430 --> 00:01:14,980

In addition to modeling  
and building the rovers,

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00:01:14,980 --> 00:01:18,700

teams must also utilize  
a host of other skills

26

00:01:18,700 --> 00:01:23,230

to showcase their work including  
marketing, communications, web

27

00:01:23,230 --> 00:01:26,320

and social media design,  
and even fundraising.

28

00:01:26,320 --> 00:01:30,460

That's because Rover Challenge  
is more than just a race.

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00:01:30,460 --> 00:01:33,640

It combines several aspects  
of real-world careers

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00:01:33,640 --> 00:01:37,480

into one exciting  
experiential design challenge.

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00:01:37,480 --> 00:01:40,180

And after all the design  
and testing is done,

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00:01:40,180 --> 00:01:44,440

teams pack their bags and rovers  
and head to the Rocket City

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00:01:44,440 --> 00:01:47,530

to network with NASA  
scientists and engineers,

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00:01:47,530 --> 00:01:50,440

to develop long-lasting  
relationships with peers

35

00:01:50,440 --> 00:01:52,810

and colleagues from  
around the world,

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00:01:52,810 --> 00:01:54,560

to enhance their  
skills in the STEM--

37

00:01:54,560 --> 00:01:58,840

Science, Technology,  
Engineering and Math-- field.

38

00:01:58,840 --> 00:02:03,100

Oh, yeah, and to earn a year's  
worth of bragging rights.

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00:02:03,100 --> 00:02:05,710

While Rover Challenge puts  
students in the driver's seat

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00:02:05,710 --> 00:02:07,040

of their education--

41

00:02:07,040 --> 00:02:12,220

literally-- it is still a race,  
a race where awards and prizes

42

00:02:12,220 --> 00:02:14,380

are offered for  
many accomplishments

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00:02:14,380 --> 00:02:17,350

not only by completing the  
course with the fastest vehicle

44

00:02:17,350 --> 00:02:21,970

assembly time and race times all  
while avoiding costly penalties

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00:02:21,970 --> 00:02:25,680

but for having the lightest  
rover, the best report, best

46

00:02:25,680 --> 00:02:29,720

website, being the most-improved  
team, and so much more.

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00:02:29,720 --> 00:02:31,130

So what's in it for NASA?

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00:02:31,130 --> 00:02:33,610

Rover Challenge represents  
NASA's commitment

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00:02:33,610 --> 00:02:35,860

to providing  
opportunities for youth

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00:02:35,860 --> 00:02:37,510

to participate in  
activities that

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00:02:37,510 --> 00:02:40,870

will prepare them to be the  
next members of a workforce that

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00:02:40,870 --> 00:02:44,140  
will lead our robust space  
exploration programs.

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00:02:44,140 --> 00:02:45,940  
It also allows  
students to conduct

54  
00:02:45,940 --> 00:02:48,460  
relevant,  
cost-effective research

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00:02:48,460 --> 00:02:51,400  
that limits the challenges that  
NASA will face as we journey

56  
00:02:51,400 --> 00:02:53,080  
to Mars and beyond.

57  
00:02:53,080 --> 00:02:56,920  
Most importantly, NASA is  
helping bright young minds

58  
00:02:56,920 --> 00:03:00,770  
launch their careers as the  
next generation of engineers,

59  
00:03:00,770 --> 00:03:03,340  
scientists, and space explorers.

60  
00:03:03,340 --> 00:03:05,080  
So what are you waiting on?

61  
00:03:05,080 --> 00:03:07,060  
NASA needs you.

62  
00:03:07,060 --> 00:03:12,070  
Visit  
[www.NASA.gov/roverchallenge](http://www.NASA.gov/roverchallenge)

63

00:03:12,070 --> 00:03:15,820

today to find out how you  
can participate in the Human