

**WHAT'S IT
LIKE
LANDING
ON MARS ?**

1
00:00:02,634 --> 00:00:04,634
What's it Like Landing on Mars?

2
00:00:08,295 --> 00:00:09,680
We Asked a NASA Technologist.

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00:00:09,680 --> 00:00:14,640
It's an intense, challenging and exciting
series of events. NASA's most recent Mars

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00:00:14,640 --> 00:00:19,680
rover, Perseverance, slowed from nearly 13,000
miles an hour to a soft landing on the surface

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00:00:19,680 --> 00:00:25,111
in about seven minutes. It involved
parachute, thrusters and even a sky

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00:00:25,111 --> 00:00:28,800
But the majority of that deceleration was
caused by the Martian atmosphere creating drag

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00:00:28,800 --> 00:00:33,120
on the rover's heat shield and that heat shield
went through a lot to keep the spacecraft safe.

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00:00:33,120 --> 00:00:37,120
Understanding what the heat shield experienced
during entry can help us design more efficient

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00:00:37,120 --> 00:00:41,360
heat shields for future missions. That's why
we installed MEDLI2, a set of temperature and

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00:00:41,360 --> 00:00:45,840
pressure sensors spread across the inside of the
heat shield that measured the extreme conditions

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00:00:45,840 --> 00:00:50,342

experienced during Perseverance's descent
to Mars. With the data collected from MEDLI2,

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00:00:50,342 --> 00:00:55,280
we'll be able to improve sizing predictions for
future heat shields and save spacecraft mass for

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00:00:55,280 --> 00:01:01,760
scientific instruments, supplies and even humans.
So, what's it like landing on Mars? It's hot and very

14
00:01:01,760 --> 00:01:06,263
challenging and that's why we're working hard
to make the process better for future missions.