1
00:00:00,000 --> 00:00:03,000
(music)

2
00:00:03,000 --> 00:00:06,000
Why is Curiosity looking for organics?

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Organics are carbon-based molecules, key ingredients to life.

4
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If Curiosity finds organics in ancient rocks, there's a better chance Mars once had good conditions

5
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for small life forms called microbes. But, finding organics is hard!

6
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That's because organics easily break down when exposed to harsh things like

7
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extreme radiation and chemical oxidants that gave the Martian surface its rusty color.

8
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A great place to look for ancient organics today is in rock layers.

9
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Organics that were quickly trapped and buried in layers of mud

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or in sediments that sank to the bottom of a body of water

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could have an especially good chance of being preserved.

12
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Scientists think Curiosity's landing site, Gale Crater, contains those special layers,

13
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created in ancient times when water was present.

14
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The water dried up long ago, but rock layers that remain today could still preserve organics inside.

15
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If Curiosity finds organics, it wouldn't prove life existed,