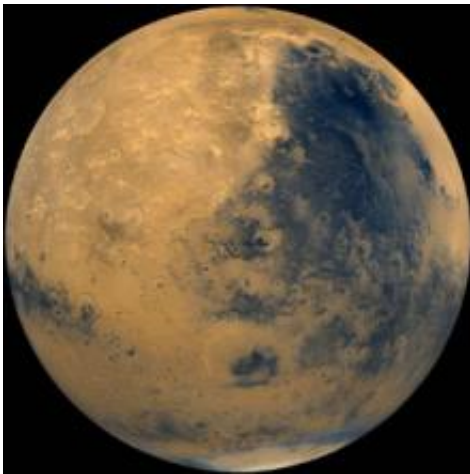


Why Mars again? A look at NASA's latest venture

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Mars. Image: NASA

(AP) — NASA's new robot rover named Curiosity landed safely late Sunday in a huge crater near the equator of Mars and will soon begin its scientific studies. This marks NASA's seventh landing on the red planet and is its 19th Mars mission, including those by orbiters and other spacecraft.

WHY MARS AGAIN?

The big unknown remains. Scientists want to know if any form of life ever existed there, and that means microscopic organisms. Curiosity is the most ambitious effort ever to burrow into that question, though it is

not equipped to look for actual microbes. During its two-year exploration, it will try to answer whether the giant crater had the right conditions to support that type of life.

WHAT WILL CURIOSITY DO?

Curiosity carries a toolbox of 10 instruments, including a rock-zapping laser and a mobile organic chemistry lab. It also has a long robotic arm that can jackhammer into rocks and soil. It will hunt for the basic ingredients of life, including carbon-based compounds, nitrogen, phosphorus, sulfur and oxygen, as well as minerals that might provide clues about possible energy sources.

HOW MUCH DID THIS COST?

\$2.5 billion. Development took longer than planned, delaying the mission for two years and costing \$1 billion more than the original budget. But that extra time is credited in part with the safe landing of the one-ton rover which required new technologies and highly complicated maneuvers.

WHEN WILL WE SEND ASTRONAUTS TO MARS?

President Barack Obama has set a goal for astronauts to orbit [Mars](#) by the mid-2030s followed by a landing. Before that can happen, the plan is to send astronauts to an asteroid first.

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