A peek at what NASA's new rover packed for Mars

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If you were packing for Mars, what would you bring?

NASA's latest tourist, the roving robot named Curiosity, will lug around a suite of gadgets to snap pictures, sniff, taste and even drill. It will study the environment to figure out whether the giant crater where it lands ever possessed a habitable environment for microbial life.

The six-wheel, nuclear-powered rover is far more tech-savvy than anything that has landed before on the red planet. Here's a glimpse of some of the cool things Curiosity can do:

It carries a laser that can zap a hole in rocks up to about 25 feet (7.6 meters) away and identify the chemical elements inside. This point-and-shoot strategy saves time because if a rock looks boring, Curiosity can roll on.

Its 7-foot (2.1-meter)-long robotic arm has a power drill at the end that can bore into rocks and soil. Like a scientist in a laboratory, it can transfer the ground-up powder to its onboard workbench to tease out minerals and sniff for organics, considered the chemical building blocks of life.

What's the point of an extraterrestrial trip if you can't sight-see? Curiosity promises to be a shutterbug, toting around a set of 2-megapixel color cameras that can beam panoramas back to Earth. With YouTube fans in mind, it also packed a video camera that will record the last few

minutes of its hairy descent to Mars.

Like Mars rovers before it, Curiosity carries a weather station to take daily temperature and pressure readings and record seasonal changes.

Even before landing, Curiosity has been doing experiments, tracking radiation during the 8 1/2-month cruise to Mars. That should help NASA gauge radiation risk to future distance-traveling astronauts.

As sophisticated as Curiosity is, it won't be able to tell us whether primitive life existed on Mars once upon a time or if it's there now. The one-ton rover isn't equipped for that and its cameras are not powerful enough to see fossil relics — if they exist.

Smarts aside, engineers also outfitted Curiosity with a sense of style. It boasts 20-inch aluminum wheels — twice the size of the wheels on twin rovers Spirit and Opportunity that landed in 2004 — with spokes made of titanium and cleats for traction.

Curiosity may be tricked out, but expect some slow going. Its top speed one-tenth of a mile per hour.