



The SuperCam on Mars 2020 Rover

Why in News

NASA is sending a robot called **SuperCam** aboard the **Mars 2020 rover** to study rocks and look for signs of past life on Mars.

- The robot uses a camera, laser and spectrometers for studying **mineralogy and chemistry from up to about 7 metres away**.

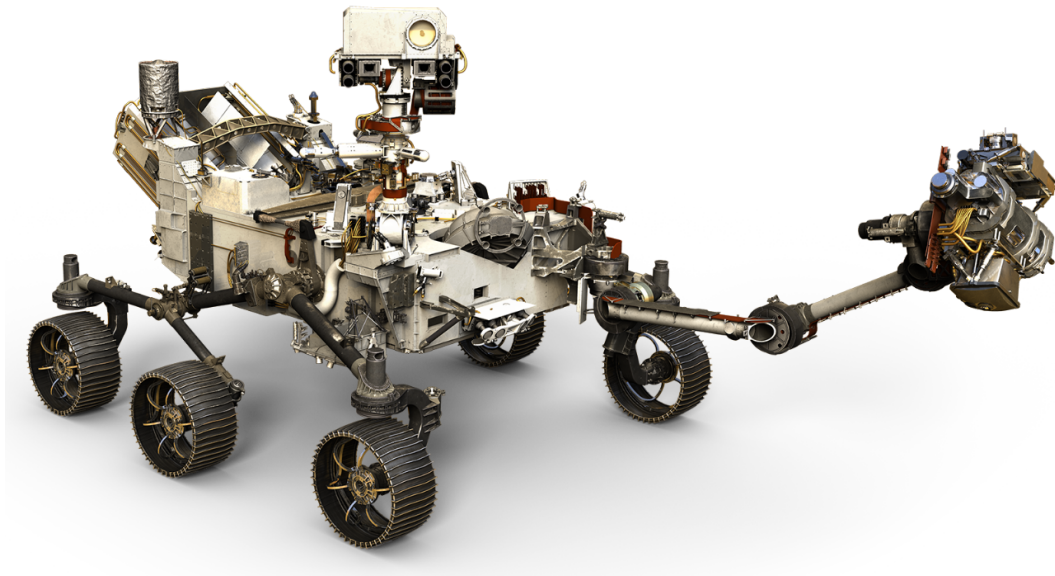
Key Points

- SuperCam's laser is uniquely capable of **remotely clearing away surface dust**, giving all of its instruments a clear view of the targets.
- It can fire a laser to **study rock targets smaller than a pencil point**.
- It will look at rock textures and chemicals to find those that formed or changed in the water on Mars' long ago.
- It will at different rock and **'soil'** types to find ones that could preserve signs of past microbial life on Mars - if any ever existed.
- It will identify which elements in the Martian dust may be harmful to humans.
- It will **measure the air** so that the scientists can learn about how atmospheric molecules, water ice, and dust absorb or reflect solar radiation. This data improves our ability to predict Martian weather.

Mars 2020 rover

- Mars 2020 rover will be launched by [NASA](#) in July-August 2020.
- It has been designed to better understand the geology of Mars and seek signs of ancient life. The mission will collect and store a set of rock and soil samples that could be returned to Earth in the future.
- It will also test new technology to benefit future robotic and human exploration of Mars.

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