

# 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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## **Source: IE**

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