

Example Rover (Can you identify the parts?)

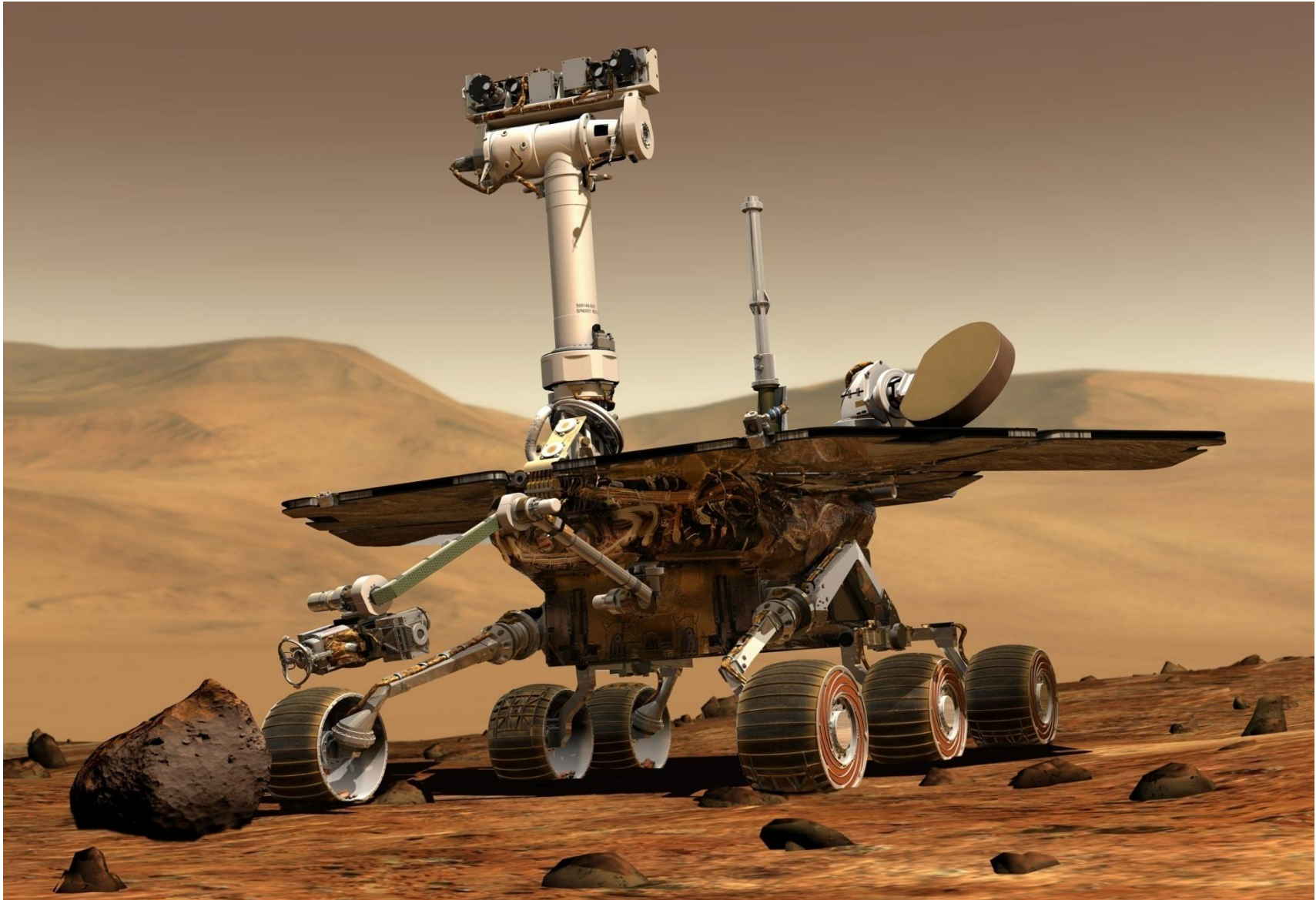


Image source: Courtesy NASA/JPL-Caltech, <http://marsrover.nasa.gov/gallery/artwork/hires/rover3.jpg>

Rover Main Parts and Functions

body: protects the rover's "organs"

brains: computers that process the rover's information

wheels: attached to the legs and allows rover movement

arm: a robotic arm used for extension and movement to use tools and instruments

energy source: solar panels and batteries

cameras: cameras mounted on the head, front or back of the rover to "see" and take pictures

communications: antennae for communication with NASA and Earth

temperature controls: heaters and insulation to protect the rover

instruments and tools, such as:

abrasion tool: scrapes rock to bring back samples

spectrometer: identifies any minerals that contain iron

x-ray spectrometer: takes x-rays of rocks and soil so NASA can identify elements in the rocks

microscopic imager: shows very small details of rocks and soil

Example Rover with Main Parts Identified

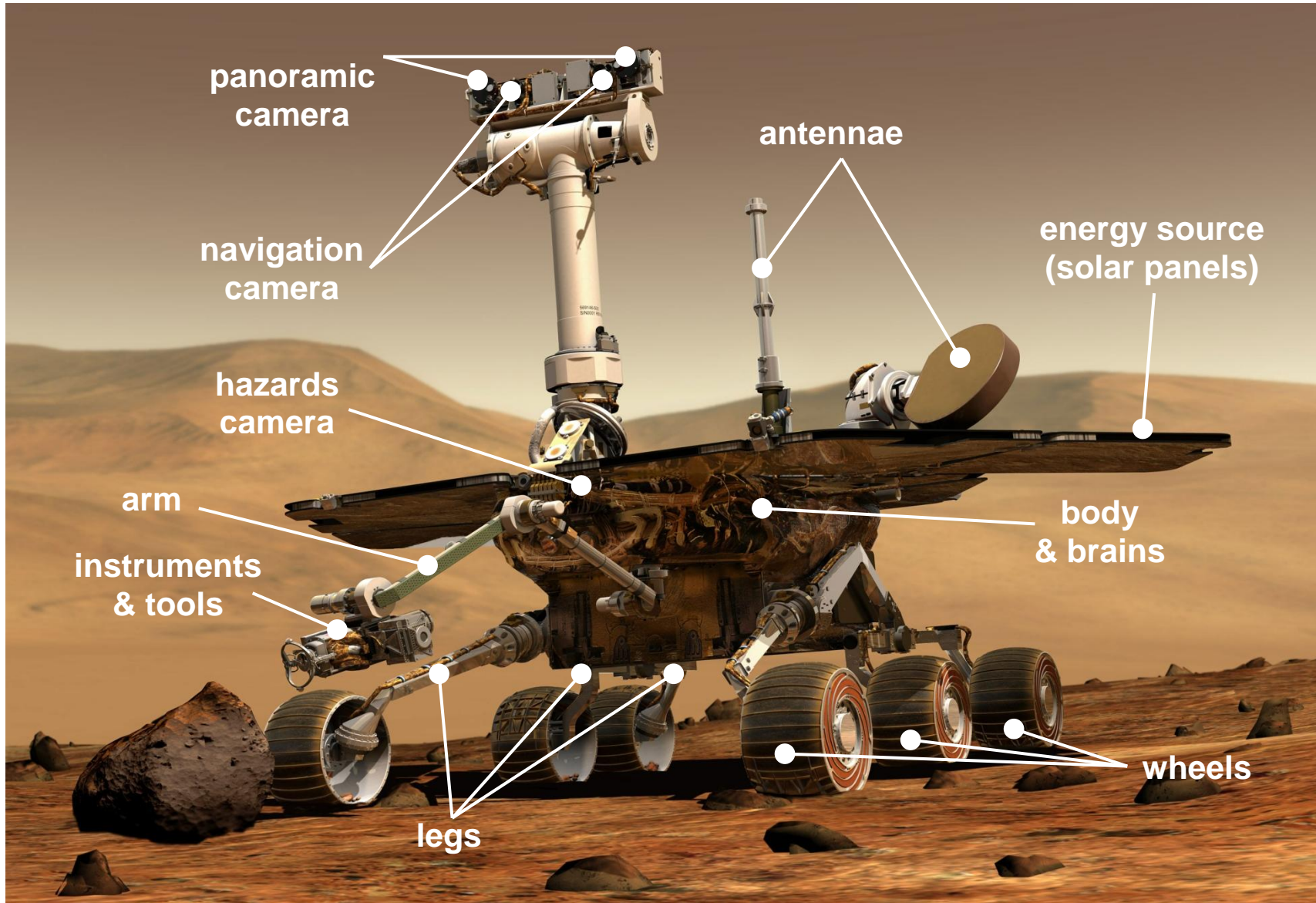


Image source: Courtesy NASA/JPL-Caltech, <http://marsrover.nasa.gov/gallery/artwork/hires/rover3.jpg>