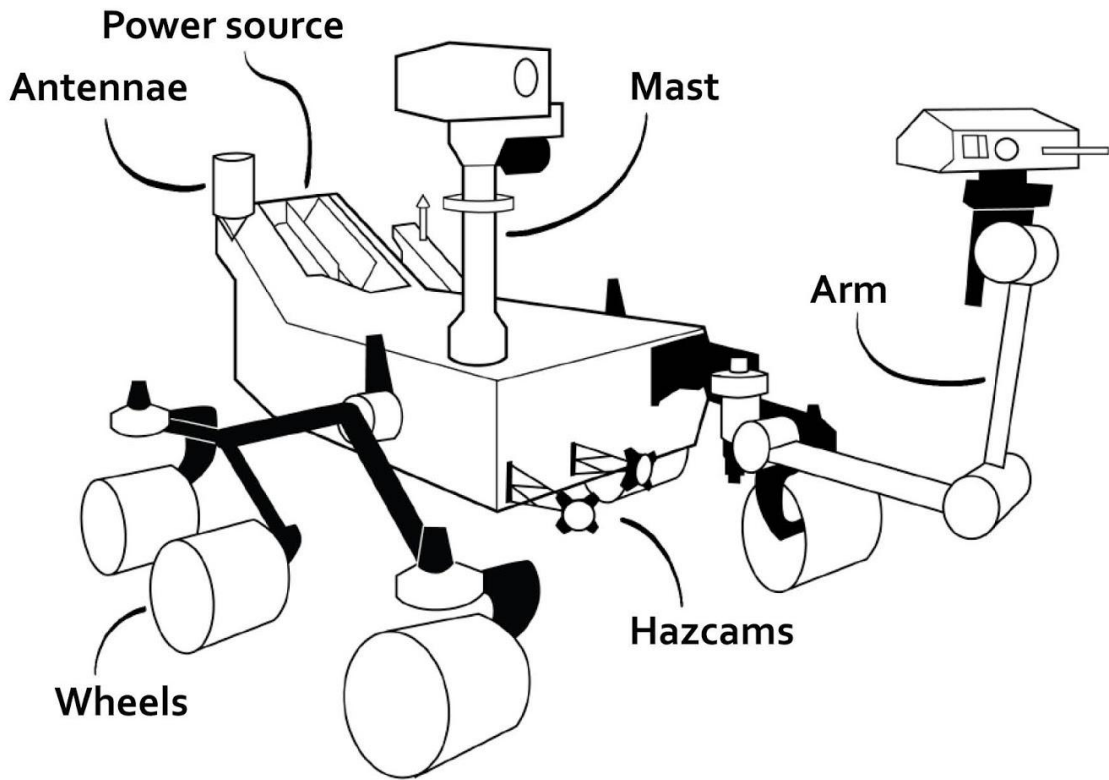
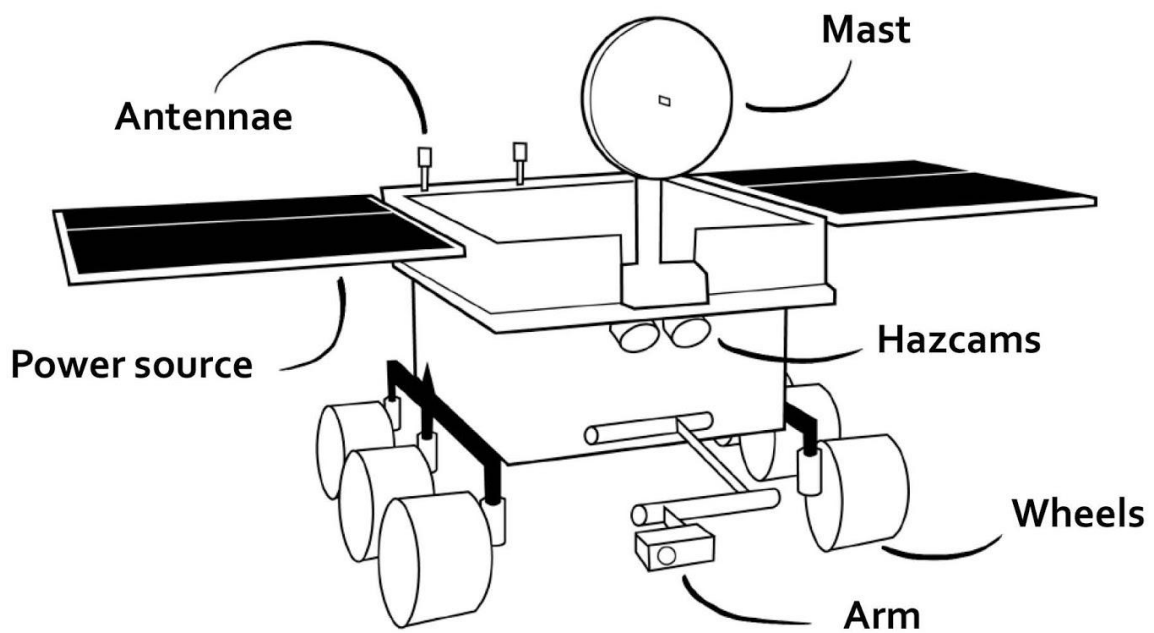


ANATOMY OF A ROVER

CURIOSITY ROVER



YUTU-2 ROVER



What makes a rover?

Rovers travel to distant moons and planets to explore them up close and send discoveries back to Earth. They use a wide variety of tools to navigate faraway worlds on their own.

Mast: Some instruments on a rover work more effectively if they're higher up off the ground. In the case of rovers on Mars, cameras are often raised to a human eye-level to simulate the angle of view that a person standing on the surface would have.

Arm: This is a moving, jointed extension with scientific instruments at the end. Arms need to be a little farther away from the rover to perform functions like drilling rock or scooping soil.

Antennae: These enable the rover to transmit information from its instruments by radio to an orbiting relay vehicle or directly to Earth.

Hazcams: These help operators on Earth look out for obstructions or hazardous changes in the ground around a rover that might block its path or cause it to tip over or fall. The term means "hazard avoidance cameras."

Wheels: Vehicle designers may choose either treads or wheels to move the rover, depending on the terrain it's expected to cover. Treads may be better over rough ground, but wheels allow for better maneuverability.

Power source: This provides the energy that a rover and its instruments need to operate. Some rovers use solar panels to turn sunlight into electricity for power. In places where there isn't as much sunlight (due to clouds or dust storms or if they're too far away from the Sun), other rovers may depend on nuclear generators to produce power.