



Art

# Year 5 Knowledge Organiser— Roving Robots

## Key Questions

What is a robot?

What features would an exploratory rover need to have to collect information from Mars?

What functions will your rover have? What mechanisms will you need to include to create these functions?

## Work Examples



## Key Designers

Mars Curiosity Rover  
Engineering Team  
2004 -2011



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## Vocabulary

Key Vocabulary	Definition
Programmable	An electronic device that can be programmed to perform specific tasks
Rover	a vehicle for driving over rough terrain, especially one driven by remote control over extra-terrestrial terrain.
Robotic	Something that is like or relates to a robot.
Automatic	A device or process that works by itself with little or no direct human control
preliminary	An action that precedes or done in preparation for something fuller or more important.
Troubleshoot	trace and correct faults in a mechanical or electronic system.
Sequential plan	performed or used in sequence.

## Key Facts

NASA's Mars Science Laboratory mission set down a large, mobile laboratory — the rover Curiosity — at Gale Crater, using precision landing technology that made one of Mars' most intriguing regions a viable destination for the first time.

The NASA/JPL Mars Science Laboratory/ Curiosity Project Team was awarded the 2012 Robert J. Collier Trophy by the National Aeronautic Association "In recognition of the extraordinary achievements of successfully landing Curiosity on Mars, advancing the nation's technological and engineering capabilities, and significantly improving humanity's understanding of ancient Martian habitable environments."

## Timeline

