

WE  
PERSEVERE



## Design a Mars Rover

- Option one: Answer the questions and draw you Mars Rover design.
- Challenge Option: Build a Mars Rover using recycled materials, Lego, sticks, whatever you have at home.

# Design a Mars Buggy

Use this template to design your own Mars buggy.

You should think about these facts:

The temperature on Mars can be as low as $-140^{\circ}\text{C}$ .	Mars experiences day and night similarly to the Earth.	Gravity on Mars is only 38% as strong as on Earth.
Mars' surface is bumpy and rocky with large hills and valleys.	The surface of Mars gets plenty of light from the Sun but there is little protection from its UV rays.	There are large dust storms on Mars.

**1.** Write a list of things that your Mars buggy needs to be able to do.

**2.** For each item on your list, come up with a design feature that your buggy will need to achieve this.

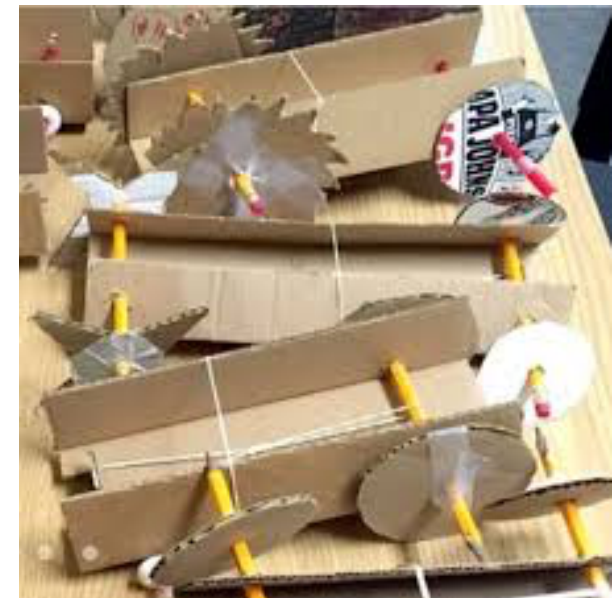
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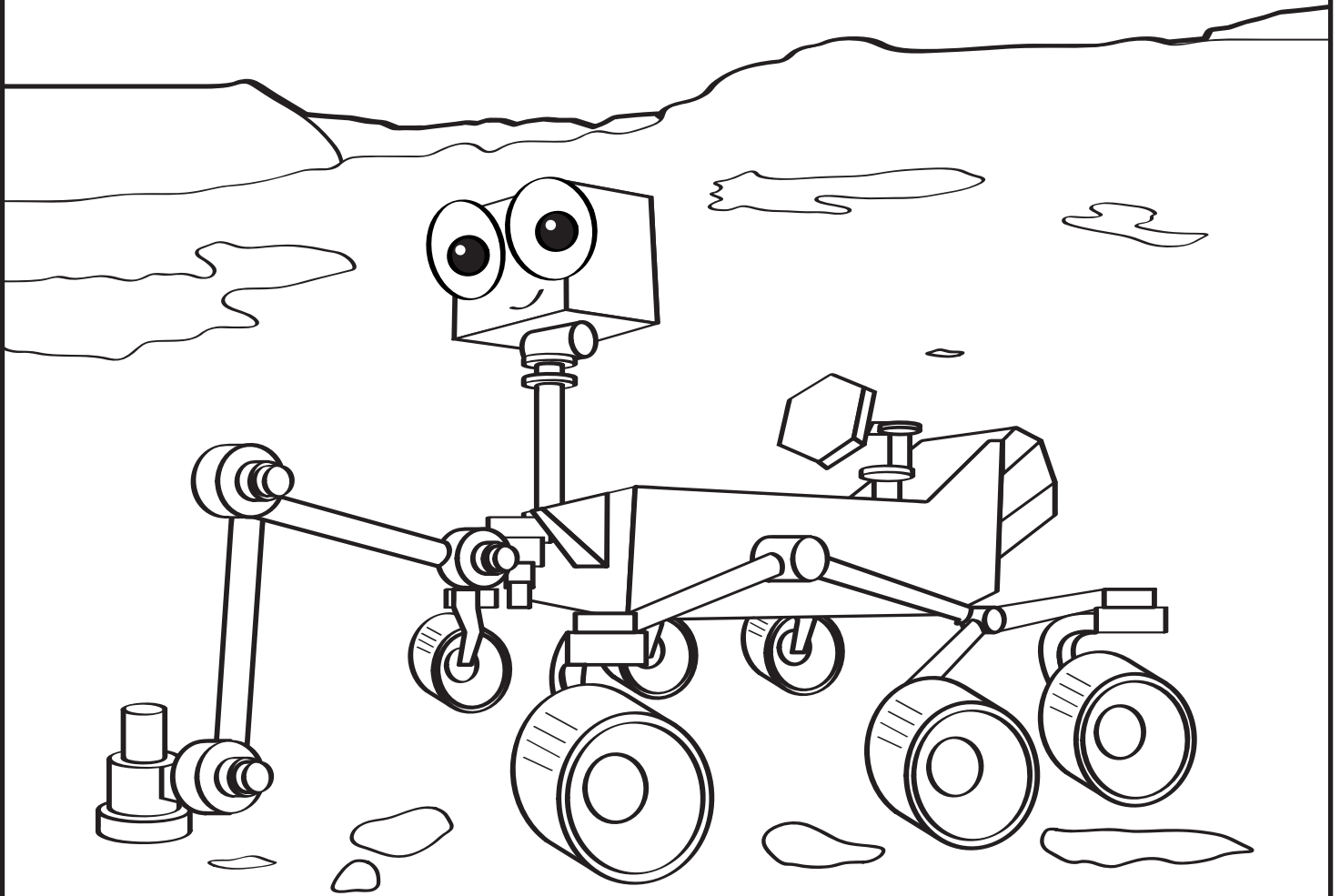
## Design a Mars Buggy

On this page, draw a detailed diagram of your buggy.

Label each of your design features and anything extra that you think your buggy needs.







# PERSEVERANCE

- The Perseverance rover is looking for signs of ancient life on Mars, collecting rock and soil samples that might return to Earth one day.
- It landed on Mars in Jezero Crater, where a river delta flowed into an ancient lake a very long time ago.
- It weighs approximately 2,260 pounds.
- It has 23 cameras to navigate, study and photograph the Red Planet.

Want to explore Mars for yourself? Check out our Explore Mars game at: [spaceplace.nasa.gov/explore-mars](https://spaceplace.nasa.gov/explore-mars)