

# Visiting an Asteroid

LEARN MORE:  
[jpl.nasa.gov/missions/psyche](https://jpl.nasa.gov/missions/psyche)

NASA is planning new missions to asteroids.

An artist's depiction of the NASA spacecraft that will visit an asteroid called Psyche.



**The millions of asteroids in our solar system are debris from its formation. By studying asteroids' shapes, sizes, and compositions, scientists gather clues about how planets like Earth formed.**

The Psyche mission, expected to launch in 2022, will visit an asteroid called Psyche orbiting between Mars and Jupiter. Psyche is a rare asteroid—it's made of metals like iron and nickel rather than rock. There are several hypotheses about how Psyche formed, but some scientists think that Psyche may be the core of a planet that had its exterior stripped away due to an enormous collision.



Many asteroids have rocky surfaces covered with rubble. This close-up image of asteroid Benu is from NASA's OSIRIS-REx mission in 2019.