

# NASA's journey to unique metal world

NASA is to explore a giant asteroid which, unlike most other asteroids that are rocky or icy bodies, appears to be the exposed metal core of a planet from the early days of our solar system

## PSYCHE ASTEROID

- ◆ **Diameter:** 226km – about one-sixteenth of Moon's diameter
- ◆ **Composition:** As much as 95% nickel and iron – similar to Earth's core
- ◆ **Origin:** Scientists believe Psyche could be remains of small planet that lost rocky outer layers in violent collisions, billions of years ago



## SPACECRAFT INSTRUMENTS

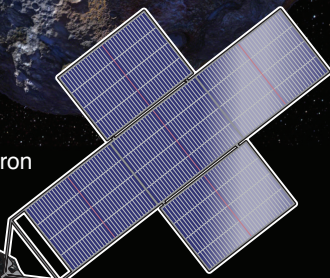
- ◆ Multispectral imager
- ◆ Gamma ray and neutron spectrometer
- ◆ Magnetometer
- ◆ X-band radio telecommunications system

Length:  
24.76m

Width:  
7.34m



**Data from Psyche will help scientists understand how terrestrial planets – including Earth – form**



**1 Aug 2022:** Launch

**2 May 2023:** Mars flyby and gravity assist

**3 Jan 2026:**  
Arrival at Psyche

**4 Oct 2027:**  
Mission ends after orbiting asteroid for 21 months

