Mission aims to grab piece of Martian moon

A Japanese mission will attempt the first-ever sample return from a Martian moon, aiming to crack the mystery of how Phobos formed – and even shed light on the origins of life in the solar system

MARS MOONS EXPLORATION (MMX) MISSION

Journey to Phobos

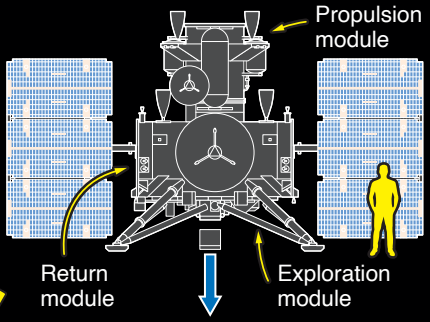
1. MMX spacecraft leaves Earth
2. In orbit around Phobos MMX sends rover to surface
3. MMX lands and collects sample of moon rock
4. Returns with sample to Earth

EARTH

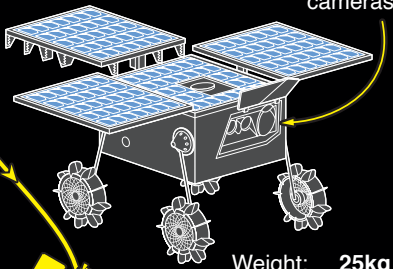
MARS

PHOBOS
Diameter:
20km

MMX SPACECRAFT



IDEFIX: Named after dog in ***Astérix*** comic books, rover will be released from spacecraft 40 metres above moon's surface



Weight: **25kg**
Height: **51cm**
Width: **40cm**

HOW PHOBOS AND DEIMOS CAME TO BE?

Duo of Martian moons could be asteroids captured long ago in planet's orbit, or debris from giant collision between red planet and another celestial body

Sources: JAXA, ESA Pictures: NASA/JPL-Caltech/USGS/University of Arizona © GRAPHIC NEWS