

- How does this text use language to engage the reader?

Mission to Mars

Bringing back life from the Red Planet will require a global effort and may well prove dangerous.

It would be the most technologically challenging space mission since the Apollo programme landed astronauts on the moon in 1969. An international team of scientists has put together detailed plans for a mission to bring back samples of rock, and possibly microscopic life, from the surface of Mars.

5 To be successful the mission, which is proposed for launch between 2018 and 2023 and could cost up to \$8bn, would require expertise and funding from both Nasa and the European Space Agency. "This is going to be extremely expensive and no one space agency can afford it," said Professor Monica Grady, at the Open University. Grady, who co-chaired the expert panel that wrote the mission proposal, said it was a vital next step before a possible crewed mission to the Red Planet.
10 "If you can't bring a rock back you are not going to be able to bring people back. There's a real feeling that bringing samples back from Mars is essential if we are going to continue our Martian exploration programme."

15 Sending people to Mars will probably not be possible before 2050, but if a crewed mission were ever to go ahead, scientists and engineers would need to prove that it is possible to land a craft on the surface of Mars and bring it back to Earth safely. There have been seven successful landings on the Red Planet since the US spacecraft Mariner 4 flew past Mars for the first time in 1965, but no spacecraft has ever taken off from the surface again or brought anything back to Earth. The proposal is the result of an eight-month study by 31 scientists from around the world. To hit the proposed timescale, technology development for the mission will need to begin by 2011.

20 Professor Colin Pillinger, at the Open University, said returning samples from the Red Planet would allow scientists to carry out much more sophisticated analyses on the rocks and permit a more detailed search for simple Martian life forms. Pillinger added, "Avoiding contamination would be extremely difficult. You have to be very careful not to bring anything back that might be harmful to Earth. Your mission has to be guaranteed, and I really mean guaranteed, to get into the Earth's
25 atmosphere without damaging itself."

30 If Martian microbes do exist they must be extremely hardy, having survived the planet's freezing, desiccated* surface and bombardment with UV radiation, so if the returning spacecraft blew up on re-entry scientists could not be sure that Martian life forms on board would be destroyed in the blast. It would also be impossible to know what they would do to life on Earth.

James Randerson, "Mission to Mars", *Guardian Weekly* (25 July 2008).
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* desiccated: dry