

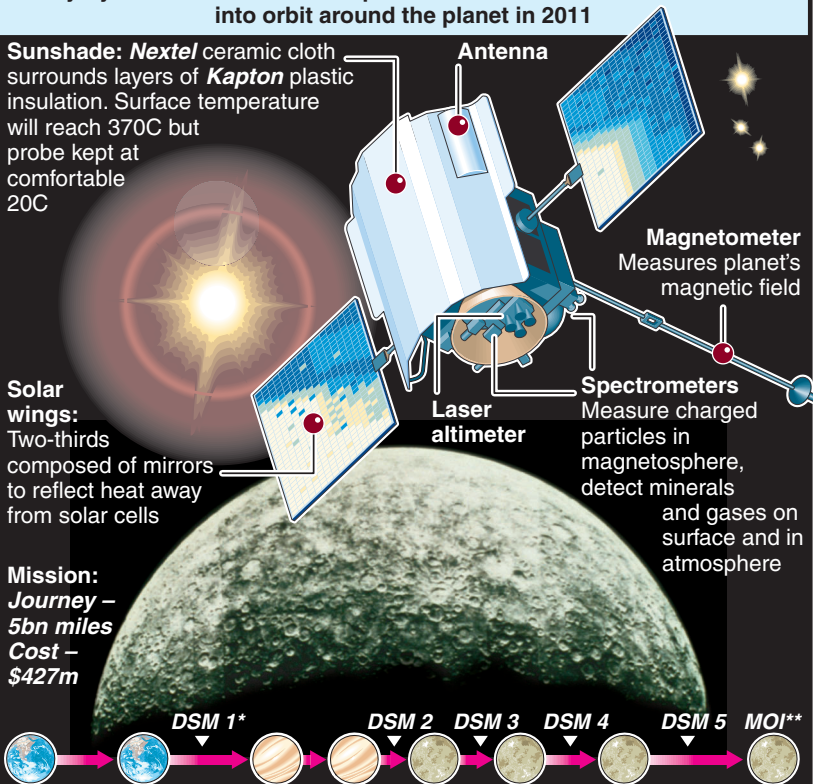
Messenger makes historic Mercury flyby

NASA returns to Mercury for the first time in almost 33 years with its Messenger spacecraft passing the planet at a distance of just 200km. The fly-by is the first of three the probe will make as it slows itself to enter into orbit around the planet in 2011

Sunshade: *Nextel* ceramic cloth surrounds layers of *Kapton* plastic insulation. Surface temperature will reach 370C but probe kept at comfortable 20C

Solar wings: Two-thirds composed of mirrors to reflect heat away from solar cells

Mission:
Journey – 5bn miles
Cost – \$427m



Aug 2, 2004 Launch	Aug 1, 2005 Swings past Earth for gravity assist	Oct 24, 2006 Jun 6, 2007 Venus flybys	Jan 14, 2008 Oct 6, 2008 Sep 30, 2009 Mercury flybys	Mar 18, 2011 Start of year-long orbit of Mercury
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*Deep Space Manoeuvre **Mercury Orbit Insertion

Source: NASA © GRAPHIC NEWS