Questions are based on the following passages.

Passage 1 is adapted from Michel Marriott, "Mars 2112: A Space Odyssey" ©1999 by The New York Times. Passage 2 is from the editors of New Scientist, "Taming the Final Frontier." ©2013 by New Scientist.

Passage 1

In the waning moments of the 20th century, as the gap between science fiction and science fact shrinks, technology fantasies are becoming tougher to come *Line* by. Who, then, would not want to take a bite out of 5 the red planet?

Mars 2112, a new \$15 million theme restaurant in Manhattan, tries to create the experience of a meal on the planet Mars. "It's the fusion of fun, good food and fantasy," said Paschal M. Phelan, an energetic 10 businessman who is the founder and principal stockholder in the company that operates the 33,000

Reached by way of a sunken plaza of the Paramount Building at 51st Street and Broadway, 15 Mars 2112 exhibits higher technologies from the first glance. A flying saucer 22 feet in diameter is frozen in flight outside the restaurant's glass front doors. Inside is a shiny, slender space that looks like a Greyhound bus station designed by National 20 Aeronautics and Space Administration eggheads.

square foot restaurant, which opened in November.

Visitors are ushered to gates to await shuttles to Mars, Yes, shuttles—really a motion ride that bumps, pitches and sways for about five minutes through a computer-generated wormhole to the fourth planet, 25 tens of millions of miles away.

Upon arrival, patrons take a short walk over industrial-style walkways suspended over pools of simulated bubbling lava. The cavernous, 400-seat restaurant has two tiers and looks as if it's ready for 30 shooting to resume for the original "Star Trek." The only windows are those cut into the restaurant's rock walls to offer glimpses of animated star fields and computer-generated Martian landscapes.

The restaurant has a bar for adults and a
35 computer-age arcade for youngsters called Cyber
Street. Mr. Phelan said he planned to open satellite
restaurants, but he is clear about the special hold that
dreams of high technology have on Americans. "This
is where it all started," said Mr. Phelan, who made
40 his fortune as a cattle farmer and beef processor in
Europe.

He said he was not especially worried about whether the poor performance of many theme restaurants these days would affect Mars 2112.

45 "Our whole mission is to convince people that they are on Mars," said Mr. Phelan, a towering man with steel-gray hair and bushy eyebrows. Besides, he said, beaming, it will be 113 years before anyone will know if he got it right.

Passage 2

50 The motivation for deep-space travel is shifting from discovery to economics. The past year has seen a flurry of proposals aimed at bringing celestial riches down to Earth. No doubt this will make a few billionaires even wealthier, but do we all stand to 55 gain? Could the mineral bounty and spin-off technologies really enrich us all?

Before the miners start firing up their rockets, we should pause for thought. At first glance, space mining seems to sidestep most environmental 60 concerns: there is probably no life on asteroids, and thus no habitats to trash. But its consequences —both here on Earth and in space—merit careful consideration.

Part of this is about principles. Some will argue 65 that space's "magnificent desolation" is not ours to despoil, just as they argue that our own planet's poles should remain pristine. Others will suggest that glutting ourselves on space's riches is not an acceptable alternative to developing more sustainable 70 ways of earthly life.

History suggests that those will be hard lines to hold, and it may be difficult to persuade the public that such barren environments are worth preserving. After all, they exist in vast abundance, and even 75 fewer people will experience them than have walked

through Antarctica's icy landscapes.

There's also the emerging off-world economy to consider. The resources that are valuable in orbit and beyond may be very different to those we prize on 80 Earth. Questions of their stewardship have barely been broached—and the relevant legal and regulatory framework is fragmentary, to put it mildly.

Space miners, like their earthly counterparts, are often reluctant to engage with such questions.

85 One speaker at last week's space-mining forum in Sydney, Australia, concluded with an insistent plea that regulation should be avoided. But miners have much to gain from a broad agreement on the for-profit exploitation of space. Without consensus, 90 claims will be disputed, investments risky, and the

of claims will be disputed, investments risky, and the gains made insecure. It is therefore in all of our long-term interests to seek one out.