

Read these selections and answer the questions that follow.

from **Why Go Back to the Moon?**

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ASSESS

The practice test items on the next few pages match skills listed on the Unit Goals page (page 571) and addressed throughout this unit. Taking this practice test will help you assess your knowledge of these skills and determine your readiness for the Unit Test.

REVIEW

After you take the practice test, your teacher can help you identify any skills you need to review.

- Elements of an Argument
- Persuasive Techniques
- Fact and Opinion
- Media: Persuasive Techniques
- Specialized and Technical Vocabulary
- Thesaurus
- Compound-Complex Sentences

Using the moon as a launching pad for Mars, as President Bush suggested last week, may not be the most sensible route to the Red Planet. But that doesn't mean a return to the moon shouldn't be part of a reinvigorated human spaceflight program. There are plenty of reasons to go back to the world we abandoned 30 years ago—some fanciful and futuristic, others quite practical.


At the more practical end, the moon offers unique opportunities for scientific research. Going there is the only way to figure out where the moon came from, for example. Current theory says it was blasted from Earth in a collision with a planet-size object billions of years ago, but the moon rocks we have in hand from the Apollo missions don't offer enough mineralogical clues
10 to prove or refute the idea.

The moon would also be a terrific place to build astronomical observatories. With no atmosphere to interfere with precision optics, it offers both the clarity of outer space and a surface solid enough to support enormous structures. . . .

Another good reason to go is the one disdained by straight-to-Mars boosters: learning how to live off the land—manufacturing some of what we need from soil that contains oxygen, silicon, aluminum, iron, calcium, magnesium and titanium, plus a dusting of helium, hydrogen, nitrogen and carbon deposited by solar winds.

To some dreamers, the presence of silicon, especially, suggests a way to make
20 a return to the moon pay—and maybe even save the environment back home. If you could set up automated lunar factories to extract the silicon and turn it into solar cells, says David Criswell, director of the Institute for Space Systems Operations at the University of Houston, the moon could become a solar power station, beaming clean energy via microwaves back to Earth. . . .

The fact that solar power isn't yet cost effective on Earth makes this high-tech scenario seem a bit farfetched. The same goes for another energy-producing idea: extracting helium-3, an isotope rare on Earth but relatively abundant on the lunar surface, and shipping it back to fuel nuclear-fusion power plants. First, though, somebody would have to demonstrate that fusion
30 reactors actually work.

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