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Aii Language Center

A Mengly J. Quach Education School

Name: _____

QUIZ

Points: _____

Reading Explorer 3: Unit 12 Lesson B

DIRECTIONS: Choose the best answer for each question.

The Ultimate Trip

[A] Although we have sent unmanned spacecraft to Mars and other parts of our solar system for decades, humans haven't ventured more than 650 kilometers from Earth since 1973. However, there is increasing interest in sending new missions - both robotic and manned - into space. Unlike in the past, this renewed interest is not primarily being driven by government agencies. Instead, private companies are leading today's new age of space exploration.

[B] Astronauts and supplies from the United States used to be transported to the ISS by NASA's space shuttles. But the space shuttle program ended in 2011. In early 2012, SpaceX, a private company based near Los Angeles, sent an unmanned rocket to the ISS. SpaceX and other private companies are now competing to replace the shuttle to become the ISS's main supply ship.

[C] Another company called Planetary Resources - which received backing from Google executives - has developed plans to use robotic spacecraft to mine asteroids for precious metals. One that the company hopes to find is platinum, a metal so rare on Earth that an ounce costs \$1,600. Robots will have to travel millions of kilometers to locate and mine asteroids, and this requires technology that doesn't exist yet. However, this isn't stopping companies like Planetary Resources and others from trying. They are investing millions into research, hoping to create tools that will make space mining possible. "This is the beginning of the new space age," says Dr. Mason Peck, NASA's Chief Technologist. "The energy we see now - the economic motivation to go into space - we haven't seen that before."

[D] For centuries, economics has driven exploration. A thousand years ago, merchants risked the dangers of the Silk Road to reach the markets of China. In the 15th century, European ships traveled to new worlds, searching less for knowledge than for gold and spices. "Historically, the driver has always been the search for resources," explains investor Peter Diamandis. If you want people to explore space, he says, create an economic incentive.

[E] Entrepreneur Elon Musk, the founder of SpaceX, is spending a large part of his fortune on his own space program. SpaceX has developed a rocket that transports cargo to the ISS relatively cheaply. Musk reduced costs by creating reusable rockets - in the same way that we reuse a plane after a flight. People first thought that creating reusable rockets would be extremely difficult, or even impossible, but Musk knew there was no other way to keep costs down. "If we threw away airplanes after every flight," he says, "no one would fly."

[F] For Musk, creating reusable rockets has been part of a much bigger plan: He wants to establish a human colony on Mars. NASA has had enormous success on Mars with unmanned spacecraft, but it has yet to launch a manned mission. Musk says SpaceX could put astronauts on Mars within 10 years, and keep sending them for decades after that. "We can't send one little group to Mars," he says. "We have to take millions of people and lots of equipment to Mars to make it a self-sustaining civilization." It will be the hardest thing that humanity has ever done, but Musk thinks his company can do it and he's eager to see it happen. "It's about making life multiplanetary," he says. "It's about getting out there and exploring the stars."

1. Which would be the best alternative title for this passage?
 - a. The First Manned Mission to Mars
 - b. Supplying the International Space Station
 - c. New Frontiers for Space Exploration
 - d. A New Route for the Silk Road
2. What is the purpose of paragraph C?
 - a. to introduce the idea of asteroid mining
 - b. to compare current platinum prices with gold
 - c. to identify the billionaires from Google
 - d. to declare a new space age for NASA
3. Which opinion would Peter Diamandis most closely agree with?
 - a. The Silk Road through Central Asia connected China with the Mediterranean.
 - b. Renaissance explorers were rewarded with gold and spices.
 - c. NASA should devote more economic resources to renovating the shuttle.
 - d. Money is the main thing that will motivate people to explore space.
4. The following sentence would be best placed at the end of which paragraph?

"In addition to reusable rockets, Musk is committed to electric cars as founder and CEO of Tesla."

- a. Paragraph B
 - b. Paragraph C
 - c. Paragraph E
 - d. Paragraph F
5. How does Musk see the establishment of a human colony on Mars?
 - a. as consisting of only trained astronauts
 - b. as an ongoing process of sending millions of people
 - c. as leading to having more unmanned missions to explore other planets
 - d. as an opportunity to move his company - SpaceX - to Mars

1	2	3	4	5

DIRECTIONS: Choose the best answer for each question.

From the Earth to the Moon ... Again?

[A] After the successful Apollo 11 mission of 1969, it was commonly assumed that lunar landings and further exploration of the moon's surface would become common practice. It was not uncommon to believe that, by the year 2000, space pioneers would have already ventured to Mars and beyond. Two decades into the 21st century, we now know that this was not to be. Indeed, no human being has stepped foot on the moon, let alone Mars, since 1972 when NASA - the United States space agency - completed the Apollo 17 mission.

[B] What explains this lack of progress with space exploration? There are a few key reasons. First and foremost, the competition to land a human on the moon ended in the 1970s. For about two decades, the United States and the Soviet Union faced off in what became known as the "Space Race" - an attempt by the rival countries to be the first to reach key space milestones.¹ While the Soviets were the first to launch an astronaut into outer space (Yuri Gagarin in 1961), the Americans were the first to land men on the moon (Armstrong and Aldrin in 1969). By the end of the next decade, however, the Soviets had become unable to compete with the Americans. Internal political and economic problems forced the Soviet government to shift its priorities away from the Space Race. Some argue that, without any competition, the Americans lost interest. It is also important to recognize that changes in the American economy also required Washington to shift its focus away from extremely costly space missions. After the 1973 oil crisis, the United States government simply did not have the extra funds to supply NASA with the necessary budget for missions to the moon or Mars.

[C] The positive news for those who want to see humanity return to the moon and attempt a landing on Mars is that some of the conditions for doing so are returning. For many years, the United States stood as the sole country with the capability of launching such missions. Now, however, growing economic powers such as China and India have expressed their desire to explore space and potentially put some of their citizens on the moon. In many ways, this has reawakened the sleeping giants, the United States and modern Russia, who do not want to be beaten at their own game.

[D] The second condition for new missions to the moon and Mars is adequate funding. While many governments still remain unwilling to use substantial tax money to back these missions, several billionaire space enthusiasts have decided to invest a fortune into space travel as a potential business opportunity. Some of the most well known of these pioneers are Jeff Bezos, founder of Amazon, and Elon Musk, co-founder of Tesla. For these individuals, the future of missions to the moon and Mars does not solely depend on the general public providing money for expert astronauts to explore and conduct their research. Rather, it depends on the general public wanting to visit the moon and Mars themselves. Although the start-up costs might be high, these billionaires believe that once space tourism catches on, missions to space will have more financial resources than ever before.

[E] As a result of these two developments, it may not be long before we are once again watching a lunar landing. In fact, it may not be that far-fetched² to suggest that some of us will be taking part in it rather than just watching it happen.

1 A **milestone** is an important event in the development of something.

2 Something that is **far-fetched** is not very believable or likely to happen.

6. What is this passage mostly about?
 - a. the progress of space exploration
 - b. the competition between the United States and the Soviet Union in the Space Race
 - c. the lack of funding space agencies receive from governments
 - d. the private companies that are planning future space tourism
7. In the fourth sentence of paragraph B, what does the phrasal verb *faced off* mean?
 - a. to defeat
 - b. to compete with
 - c. to cooperate with
 - d. to suffer from
8. According to the writer, why did the United States not have enough money to continue to support space exploration in the 1970s?
 - a. Too much money was spent competing with the Soviet Union in the Space Race.
 - b. Money had to be used to solve internal political and economic problems instead.
 - c. A lot of money was lost during the oil crisis of 1973.
 - d. Too much money was spent during the Apollo missions.
9. In the first sentence of paragraph C, what does the word *those* refer to?
 - a. astronauts and scientists
 - b. people who are interested in space exploration
 - c. China and India
 - d. governments
10. According to the billionaire space pioneers, who will be responsible for the future of space travel?
 - a. governments
 - b. other entrepreneurs
 - c. space tourists
 - d. start-up companies

6	7	8	9	10

DIRECTIONS: Read the sentences. Choose “Yes” if the sentence contains an appositive, and “No” if it does not.

- ___ 11. *"It was not uncommon to believe that, by the year 2000, space pioneers would have already ventured to Mars and beyond."*
- ___ 12. *"Some argue that, without any competition, the Americans lost interest."*
- ___ 13. *"In many ways, this has reawakened the sleeping giants, the United States and modern Russia, who do not want to be beaten at their own game."*
- ___ 14. *"Some of the most well known of these pioneers are Jeff Bezos, founder of Amazon, and Elon Musk, co-founder of Tesla."*
- ___ 15. *"For these individuals, the future of missions to the moon and Mars does not solely depend on the general public providing money for expert astronauts to explore and conduct their research."*

DIRECTIONS: Match each underlined word with the word with the same meaning.

- | | |
|--------------|---------------|
| a. backing | f. founder |
| b. resource | g. precious |
| c. a decade | h. replace |
| d. extremely | i. launching |
| e. a fortune | j. sustaining |

- ___ 16. She was impressed by the use of color and felt that the mood and lighting in the painting was captured especially well.
- ___ 17. She was a very charismatic entrepreneur who became the creator of this successful business.
- ___ 18. My mother keeps her valuable jewelry in a safe at home.
- ___ 19. It's been ten years since our last reunion and you haven't changed at all!
- ___ 20. The expectation is that once the colony is established, it will be self-maintaining.
- ___ 21. In this recipe, you can substitute cocoa for melted chocolate.
- ___ 22. They are starting a new business that will organize commercial trips to space.
- ___ 23. Oil is an asset to the wealth of countries like Canada and Iran.
- ___ 24. He inherited great wealth from his parents, so he has the time to enjoy his hobbies.
- ___ 25. The support for the new publishing project came from experienced editor.

Thanks!