Reading 3

Skills:

- Details
- Associate information
- Understand synonyms

Getting started: Do you think there's life in other planets?

SPACE FRONTIERS – THE FUTURE

Our desire to explore the universe doesn't seem to have limits. The man on the moon was just the beginning of other conquests that little by little have taken us closer to unknown worlds. However, space exploration has a high cost, and new advances and technology are necessary to continue discovering what is beyond planet Earth. The new rockets and spacecraft that will be needed to help us explore further in space are already being built and tested. Engineers are also thinking about how to do things that seem impossible today. It is possible that faster-than-light galactic travel, elevators reaching to space, and hibernating astronauts will all become a reality.

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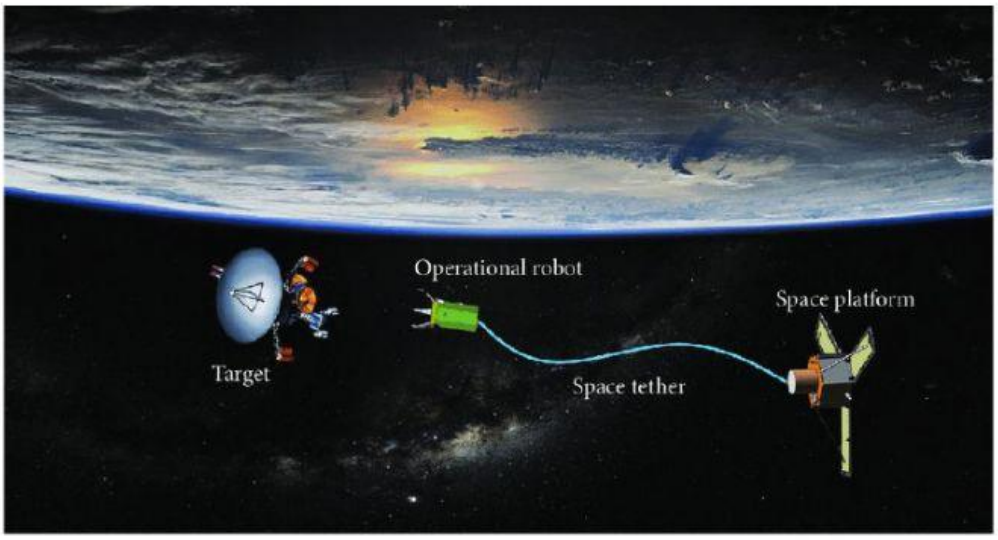
1. **SLS**

NASA is developing the world's most powerful rocket for launching craft carrying astronauts and cargo into orbit. Called the Space Launch System (SLS), its first flight is scheduled for 2021. SLS will be able to lift 143 tons, more than the weight of 85 family cars, and take people farther into space than ever before.

2. **Space Tether**



An unusual idea for moving spacecraft in space is to use a long cable known as a space tether. As a spacecraft passes through a planet's magnetic field, electricity flows along the tether. The energy could

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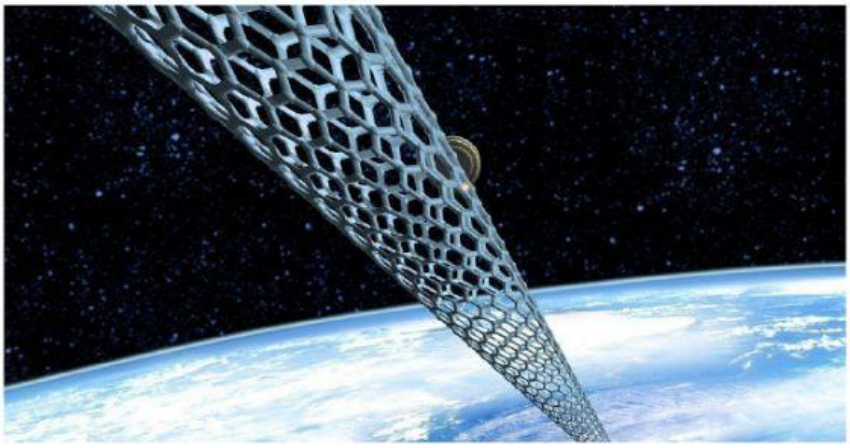
perhaps be channeled as a fuel-saving power. A rotating tether might also be used to catch a spacecraft and catapult it into a higher orbit.

3. Warp Drive

To travel faster than light, starships in movies are said to have the ability to expand the space behind them and contract the space in front of them. Scientifically speaking, the idea could potentially work, but we currently do not have the ability to do it. If we could find a way, it would allow us to venture farther in our universe than we could even imagine now.

4. Space Elevator



Imagine riding an elevator from Earth into space. Engineers suggest that such a creation could be made of super-strong carbon ribbons, anchored to the ground and extending 62,000 miles (100,000 km) into space. Elevator cars would climb up the ribbons into space.

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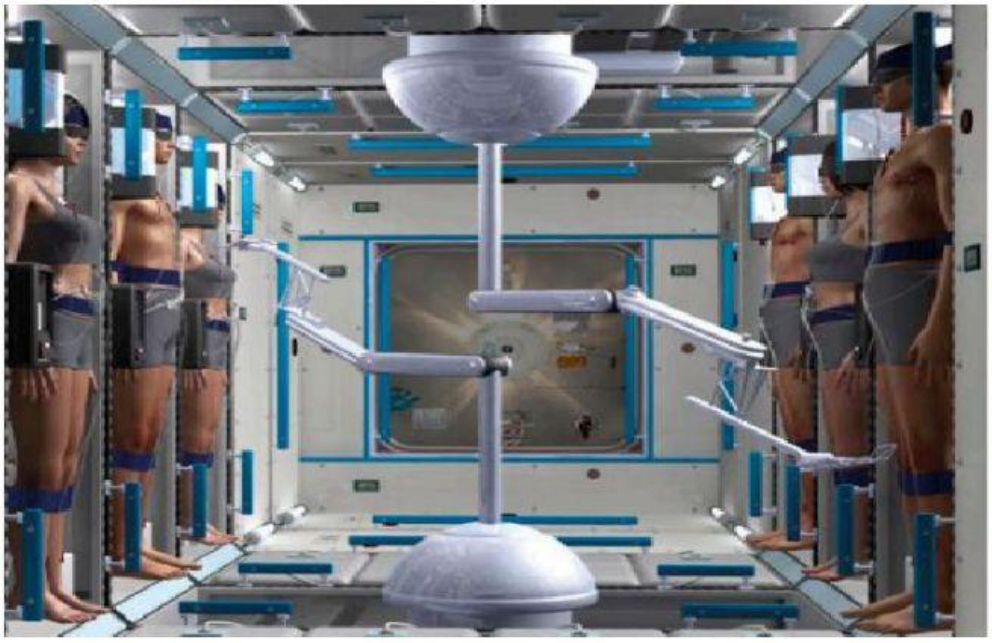
5. Sleeper Craft



For long space flights to Mars and beyond, NASA is investigating the possibility of putting astronauts into a deep sleep called torpor, similar to hibernation in animals. This might be done by lowering the astronauts' body temperature. They could then be woken on arrival.

**Adapted from How Super Cool Tech Works. DK Publishing.*

1. Look at the descriptions below. What section of the text do they refer to?

A. It may be used to pull or push other types of space vehicles or equipment in space.
B. It would take you up into the outer space.
C. It may be used to transport people and other contents.
D. It could allow people to have a long nap while they reach far destinations.
E. It might be used to travel at extremely high speeds.

2. Find synonyms for these words in the text:

Introduction

a. Wish
b. Appear
c. Only
d. Nevertheless

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Section 1 (SLS)

a. Building
b. Potent

Section 2 (Space Tether)

a. Weird
b. Maybe
c. Could

Section 3 (Warp Drive)

a. Skill
b. Concept
c. At this moment

Section 4 (Space Elevator)

a. Picture yourself
b. Insinuate
c. Fixed

Section 5 (Sleeper Craft)

a. Probability
b. Profound
c. Decreasing

What do you think?

Should humans colonize nearby places like the Moon or Mars?

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