

01

How Do We Launch Things Into Space?

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VOCABULARY

A. Select the appropriate word that corresponds with its meaning.

ORBIT

SATELLITE

GRAVITY

SPACECRAFT

PROPELLANT

- _____ 1. A vehicle that travels in space.
- _____ 2. The fuel that pushes a rocket or spacecraft forward.
- _____ 3. A path that something takes as it goes around a planet or star.
- _____ 4. A man-made object that orbits a planet to collect information or help with communication.
- _____ 5. A force that pulls things down toward the ground or toward a planet.

VOCABULARY



B. Read the summary and fill in the blanks using the words in the box.

orbit

satellite

gravity

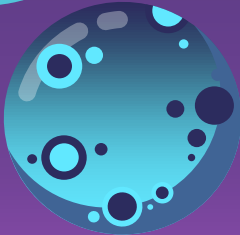
Spacecraft

propellant

(1)_____ explore faraway places in our solar system, but they can only get there with the help of rockets. Rockets burn (2)_____ to create thrust, which pushes against Earth's gravity and allows them to reach speeds of at least 17,800 miles per hour. This speed is enough to rise above most of Earth's atmosphere and stay in (3)_____. When the rocket releases a spacecraft at the right distance, it can become a (4)_____ and circle Earth for years thanks to the balance between momentum and (5)_____. To travel farther, like to Mars or Saturn, spacecraft need faster rockets and careful planning. The timing of the launch is very important, especially when planets are closest together, since it saves fuel and time. All the hard work pays off with the chance to explore new worlds and capture breathtaking views of space.

COMPREHENSION QUESTIONS

C. Answer the questions



01

What is used to launch spacecraft?

- A. Cars
- B. Rockets
- C. Submarines

02

What is the fuel in rockets called?

- A. Oil
- B. Propellant
- C. Gasoline



COMPREHENSION QUESTIONS

C. Answer the questions

03

What does burning fuel create?

- A. Smoke
- B. Thrust
- C. Fireworks

04

How fast must rockets travel to stay in orbit?

- A. 17,800 miles per hour
- B. 1,000 miles per hour
- C. 100,000 miles per hour

COMPREHENSION EXERCISE

D. Choose T if the underlined word is correct, or replace the word if it is incorrect.

- _____ 1. Spacecraft take photos of Earth and other planets.
- _____ 2. Rockets are used to send spacecraft into space.
- _____ 3. Everything on Earth is held down by gravity.
- _____ 4. Burning fuel creates thrust.
- _____ 5. A spacecraft that orbits Earth is called a satellite.



DISCUSSION QUESTIONS

E. Answer the questions

01

Would you want to ride on a rocket?
Why or why not?

02

Do you think launching rockets is worth the cost?

DISCUSSION QUESTIONS

E. Answer the questions

03

Which planet would you like to visit if you could?

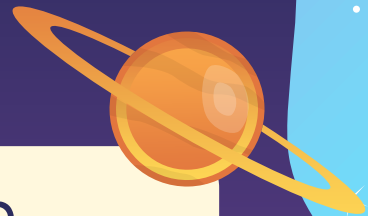
04

How do you feel when you see pictures of Earth from space?



DISCUSSION QUESTIONS

E. Answer the questions



05

Do you think living on another planet will be possible in your lifetime?

06

Why do you think people are so curious about space?

