



PHYSICS

BOOKS - NAVNEET SCIENCE (HINGLISH)

SPACE MISSIONS

Solve The Example

1. If the mass of a Planet is eight times the mass of the earth and its radius is twice the

radius of the earth, what will be the escape

velocity for that planet ?

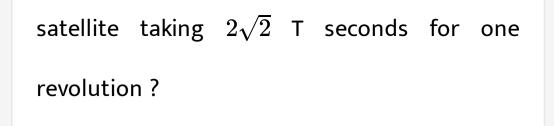


2. If the mass of a Planet is eight times the mass of the earth and its radius is twice the radius of the earth, what will be the escape velocity for that planet ?

3. How much time would a satellite in an orbit at a height of 35780 km above the earth's surface take to complete one revolution around the earth , if the mass of the earth were four times its original mass ?

Watch Video Solution

4. If the height of a satellite completing one revolution around the earth in T seconds is h_1 metres, then what would be the height of a





5. Calculate the critical velocity (v_c) of the satellite to be located at 35780 km above the surface of the earth .



6. In the above example (4) how much time will

the satellite take to complete one revolution

above 35780 km around the earth?



7. Calculate the critical velocity (v_c) of the satellite to be located at 35780 km above the

surface of the earth .



8. In the above example (4) how much time will

the satellite take to complete one revolution

above 35780 km around the earth?

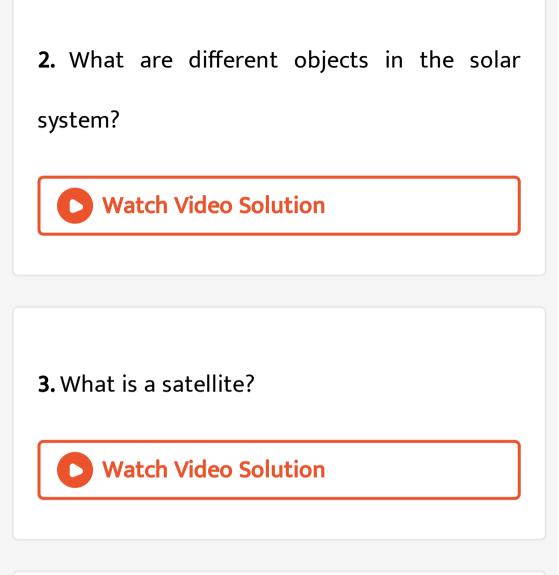


Can You Recall

1. What is the differnce between space and sky

?





4. How many natural satellites does the earth

have?



5. Which type of telelscopes are orbiting around the earth? Why it is neccesary to put them in space?

Watch Video Solution

6. Where does the signal in your cellphone

come from?

7. Where from do mobile towers receive the signals?



8. Where does the signal to your TV set come

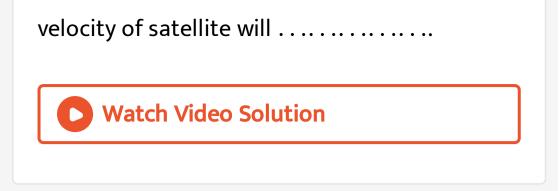
from?

9. You may have seen photographs showing the position of monsoon clouds over the country in the newspapaper. How are these images obtained?

Watch Video Solution

Fill In The Blanks And Explain The Statement With Reasoning

1. If the height of the orbit of a satellite from the earth surface is increased , the tangential



2. The initial velocity (during launching) of the Mangalyaan , must be greater than theof the earth.

Watch Video Solution

Fill In The Blanks

1. A man made object revolving around the

earth in a fixed orbit is called?

Watch Video Solution

2. Chandrayaan-I discovered the presence of ...

the moon?

3. Apart from launching a satellite around the earth, India has been able to launch a satellite around...?



4. All satellites work on energy.



5. Are used to carry and place a satellite in a specific orbit?
Vatch Video Solution

6. USA has developed As an alternative to

space launch vehicles.



7. Hubble telescope is a Satellite



8. Executed the first ever mission to the moon in the world.

Watch Video Solution

9. Executed the first manned mission to the

moon in the world.

- 1. Which one of the following is a Low Earth
- Orbit (LEO) satellite ?
 - A. Navigational satellite
 - B. Geotationary satellite
 - C. International Space Station
 - D. All of the above

Answer: A::C





2. Which of the following satellite launchers is

developed by India?

A. INSAT

B. IRNSS

C. EDUSAT

D. PSLV

Answer:

3. Which of the following astronauts travelled through space shuttle 'Discovery' first time?

A. Kalpana chawla

B. Rakesh sharma

C. Sunita Williams

D. Neil Armstrong

Answer: A

Considering The Correlation Between The Words Of The First Pair The Third Word Accordingly With Proper Answer Or Considering The First Correlation Complete The Second

1. IRNSS : Direction showing satellite :: INSAT :



2. Hubble telescope : 569 km high from earth

surface : : Revolving orbit of Hubble telescope:

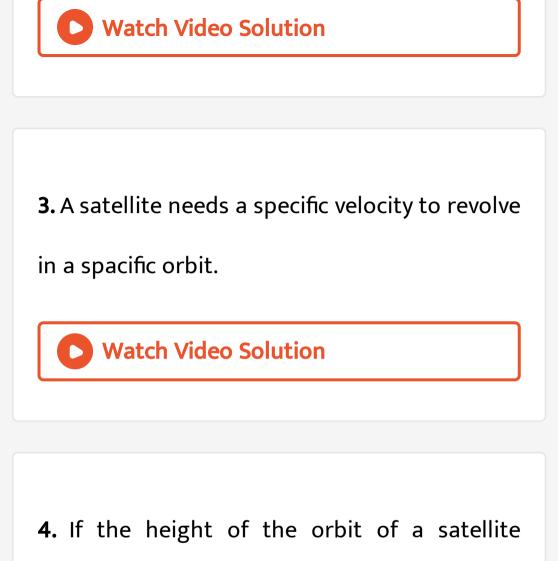
True Or False

1. If a spacecraft has to sent away from the influence of the earth's gravitational field, its velocity must be less than the escape velocity .

Watch Video Solution

2. The escape velocity on the moon is less than

that on the earth.



increases its velocity must decrease. State

Answer The Following In One Sentence Each

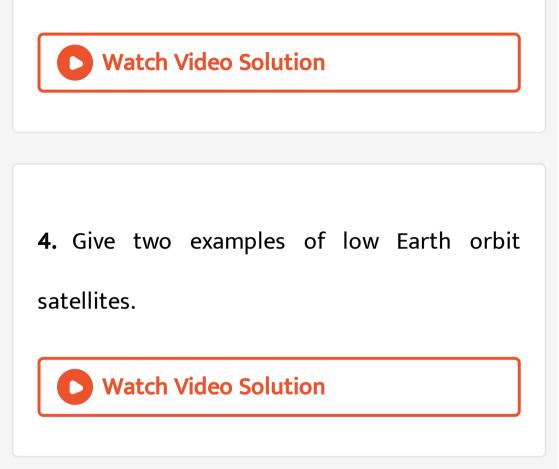
1. What do you mean by the orbit of a satellite?

Watch Video Solution

2. Which factor decides the orbit of a satellite?



3. What is a High earth orbit satellite?



5. What is a launch vehicle ?

6. Name the launch vehicle developed by India?

Answer The Following Question

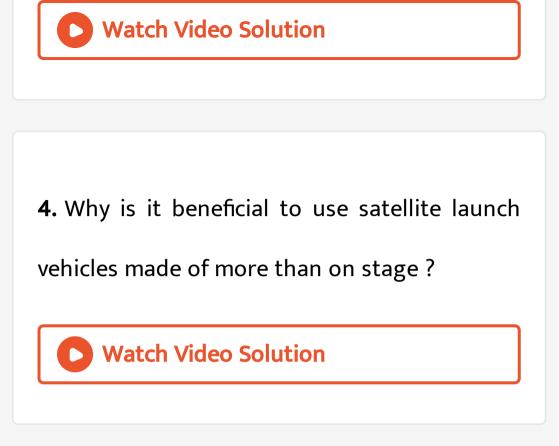
1. What is the meant by an artifical satellite? How are the satellites classified based on their functions? 2. What is meant by the orbit of a satellite? On what basis and how are the orbits of the artifical satellites classified?

Watch Video Solution

3. Why are geostationary satellites not useful for studies for polar regions? ORExplain the following statement. A

geostationary satellite is not useful in the

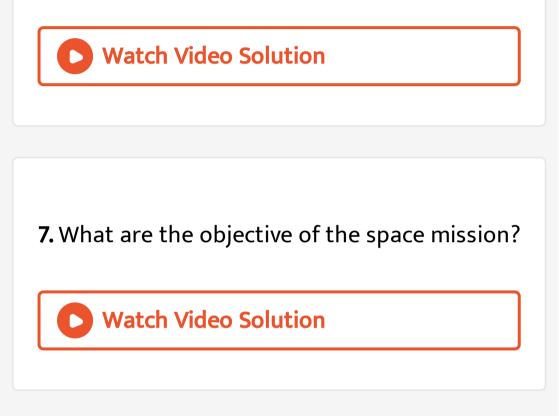
study of polar regions.



5. Explain the need and importance of space mission?



need and importance in your worlds?



8. What is meant by space debris ? Why there

is need to manage debris ?



