

## Physics (New Book) - 9th Class Physics English Medium Chapter 2 Preparation

Q1. What is graph?

**Ans 1:** Graph is a pictorial way of presenting information about relation between various quantities. The quantities are dependent and independent.

Q2. How are vector quantities important to use in our daily

**Ans 1:** Vector quantities are important to us in our daily life in engineering, building and drawing different techniques. If we want find direction of moving object then we can do with help of vector quantities.

Q3. Define Motion.

**Ans 1:** A body is said to be in motion, if it changes its position with respect to its surroundings. Example: A train is changing its position with respect of platform so it is in motion .

Q4. Mention the type of motion in each of the following

**Ans 1:** A ball moving vertically upward: If a ball is moving vertically upward then its motion is linear

**Ans 2:** A child moving down a slide: If a child is moving down at a slide then its motion is linear  
Movement of a player in a foot ball ground The motion of foot ball player is random

**Ans 3:** The Flight of a butterfly The motion of flight of butterfly is random  
An athlete running in a circular track. The motion of athlete running in a circular track is circular motion

**Ans 4:** The motion of a wheel: The motion of wheel is rotatory

**Ans 5:** The motion of a cradle: The motion of cradle is vibratory

Q5. What is LIDAR

**Ans 1:** A motorway speed camera. A LIDAR gun is light detection and ranging speed gun It uses the time taken by laser pulse to make a series of measurements of a vehicle distance from the gun The data is then used to calculate the vehicle's speed

Q6. Differentiate between variable and uniform speed

**Ans 1:** Variable speed: A body has variable speed if does not cover equal distance in equal intervals of time. however short the interval may be.

**Ans 2:** Uniform speed: A body has uniform speed if it covers equal distance interval interval of time however short the interval may be.

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Q7. Define vector and write the name of two methods of vector, quantities, representation,

**Ans 1:** Vector:  
A vector quantity is described completely by magnitude and direction  
There are two methods of vector representation.  
1- Symbolic representation  
2- Graphical representation

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Q8. Define position and give exmple.

**Ans 1:** Position means the location of a certain place or object from a reference point  
Examples: In figure the point P represents the positive of the body with respect to origin O

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Q9. How is a vector represented?

**Ans 1:** Graphically a vector can be represented by a line segment with a arrow head which represents its direction and the length of line segment gives its magnitude according to selected scale.

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Q10. What is rotatory motion? Give example.

**Ans 1:** The spinning motion of a body about its axis is called rotatory motion. Example: The Motion of wheel about its axis. Earth revolves around its geographical axis that causes day and night.

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