

What is Work?

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In this series, we are going to learn some interesting concepts related to the topic, work and energy. In this segment, we are going to understand the meaning of work in terms of physics.

What is Work?

Consider a guy doing certain activities like washing dishes, writing a letter and brushing his teeth.

Now, it is quite interesting to note that in terms of physics all these activities are not considered as work.

Work, in physics, measures the energy transfer that occurs when an object is moved over a distance by an external force at least part of which is applied in the direction of the displacement.

There are certain conditions that are required to be fulfilled for a work to be done.

What are the necessary conditions for work to be done?

There are 2 requirements that should be met for work to be done:

- 1. A force needs to be applied on the object.
- 2. The object needs to be displaced.

The direction of application of force and direction of displacement of the object plays a very important part in calculating work done.

Summary

It measures the energy transfer that occurs when an object is moved over a distance by an external force at least part of which is applied in the direction of the displacement.	Work	an external force at least part of which is
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Necessary Condition for work	1. A force needs to be applied on the object.
	2. The object needs to be displaced.

What's next?

In our next Class 9 Science segment, we shall learn more about the \mathbf{work} with the help of a few examples.