

Lesson Plan

Aims:

- Learn what “force” is
- Learn the basic laws of motion in physics

Resources:

- Power Point Presentation
- Videos for visualization
- Computer simulation to do a virtual experiment

Task 1:

Explain class which rules apply for motion. The class should get an exact definition of a force and what it does. They should learn that force is equal to acceleration.

Video 1:

Let them watch and have a discussion about the video. Did they understand the concept of 1st law? Did they get that objects remain in uniform motion if no force is applied?

Video 2:

Let them watch and have a discussion about the video. Did they understand the concept of 2nd law? Did they get that force is the cause for acceleration?

Video 3:

Let them watch and have a discussion about the video. Did they understand the concept of 3rd law? Did they get that every action has a reaction?

Simulation 1:

The simulation shows different experiments where students can learn that force is a vector. They can try out the different laws of motion and see an instant effect. Variation of different parameters do have immediate reaction.