

## Basic principles

You can skip this entire chapter either because you have background and don't need to waste your time with basic concepts or because you hate physics and all this related stuff. Anyway it's always possible to move forward and come back later if you change your mind and decide it will be useful. Or you can skip directly to parabolas and ignore forces or vice-versa. But, above all, I solemnly promise I'll do my best to write the easiest and most understandable text on this matter you can think of.

### 3.1 Forces

Everyday we have to deal with concepts that are completely described by a figure. If someone says the temperature is 60° F it's all said and there's no more to add. The same occurs with density, time, pressure and so on.

But there are other situations in which a figure is not enough. If we are referring to a force, for example. It's not enough to talk about a 5 pounds force because we still don't know where it's applied, what the direction is and if it's working from left to right or vice-versa. In this situation we use arrows to help us.

P is the point where the force applies, line **D** is the direction, 5 (pounds) is the intensity and the pointer indicates it's working from left to right.

• **Fig. 3.1**

