

#### Basic Concepts

1. The science which measures the degree of uncertainty is called probability.
2. In the experimental approach to probability, we find the probability of the occurrence of an event by actually performing the experiment a number of times and record the happening of an event.
3. The observations of an experiment are called outcomes.
4. A trial is an action which results in one or several outcomes.
5. An event of an experiment is the collection of some outcomes of the experiment.
6. The empirical (or experimental) probability  $P(E)$  of an event  $E$  is given by:  
$$P(E) = \frac{\text{Number of trials in which } E \text{ has happened}}{\text{Total number of trials}}$$
7. The probability of an event lies between 0 and 1 (0 and 1 inclusive).
8. A dice is a well balanced cube with its six faces marked with numbers 1 to 6, one number on one face. Sometimes dots appear in place of numbers.