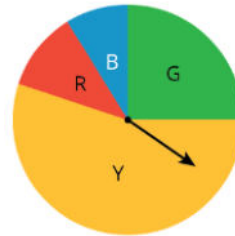


Unit 8 Glossary Terms

Chance experiment

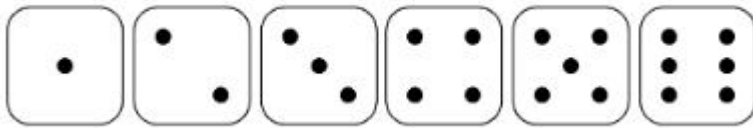
A chance experiment is something you can do over and over again, and you don't know what will happen each time.

For example, each time you spin the spinner, it could land on red, yellow, blue, or green.



event

An event is a set of one or more outcomes in a chance experiment. For example, if we roll a number cube, there are six possible outcomes.



Examples of events are “rolling a number less than 3,” “rolling an even number”, or “rolling a 5”.

outcome

An outcome of a chance experiment is one of the things that can happen when you do the experiment. For example, the possible outcomes of tossing a coin are heads and tails.

probability

The probability of a chance event is a number from 0 to 1 that expresses the likelihood of the event occurring, with 0 meaning it will never occur and 1 meaning it will always occur.

Sample space

The sample space is the list of every possible outcome for a chance experiment.

For example, the sample space for tossing two coins is:

heads-heads	tails-heads
heads-tails	tails-tails

Addition rule

The addition rule states that given events A and B, the probability of either A or B is given by $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$.

Dependent events

Dependent events are two events from the same experiment for which the probability of one event depends on whether the other event happens.

independent events

Independent events are two events from the same experiment for which the probability of one event is not affected by whether the other event occurs or not.

Conditional probability

The probability that one event occurs under the condition that another event occurs.