# CHAPTER 6
# Modeling Random Events: The Normal and Binomial Models

## Section 6.1 Probability Distributions are Models of Random Experiments

Write the vocabulary terms in this section on 3 x 5 cards and study them. Important terms include **probability model, probability distribution, discrete outcomes (discrete variables), and continuous outcomes (continuous variables), probability density curve.**

Be sure to also read and study the key points, highlighted in the blue boxes in the text.
Be able to

- Explain what two things a probability distribution tells us
- Determine if a given variable is discrete or continuous
- Explain why the area under a probability density curve is 1
- Know the different ways that probability density functions can be displayed

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## Section 6.2 The Normal Model

Write the vocabulary terms in this section on 3 x 5 cards and study them. Important terms include: **normal model, normal curve, normal distribution, mean of a probability distribution, standard deviation of a probability distribution, standard Normal model, and percentile.**
Be sure to also read and study the key points, highlighted in the blue boxes in the text.

- Know when the normal model applies and what the density curve looks like
- What is the big idea in the section? What do we use the Normal distribution for?
- Find at least two ways of finding probabilities with the normal model
- What is the mean and standard deviation of the standard normal model?

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