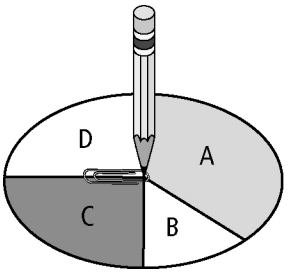
Chapter 5 Gifted and Enrichment Answers

1. There are eight equal sections on the spinner. C is the equivalent of two sections of the spinner. The probability of spinning C is $\frac{2}{8} = \frac{1}{4}$. Therefore, the probability of spinning two Cs in a row is $\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$.



2. There are $6 \times 6 \times 6 = 216$ possible combinations when three number cubes are rolled together. There are only four possible combinations that result in a total higher than 13. Therefore, the probability of rolling a sum greater than 13 is $\frac{4}{216} = \frac{1}{54}$.

3.

Q1	R1
	R2
Q1	Y1
	Y2
Q1	B1
Q2	R1
	R2
Q2	Y1
	Y2
Q2	B1

N1	R1
	R2
N1	Y1
	Y2
N1	B1
N2	R1
	R2
N2	Y1
	Y2
Q2	B1

There are 20 possible outcomes from this draw. There are four possible outcomes resulting in the drawing of a quarter and a yellow gummy bear. The probability of drawing a quarter and a yellow gummy bear is $\frac{4}{20} = \frac{1}{5} = 20\%$.

4. The probability of selecting blue socks is $\frac{2}{5}$. The probability of selecting blue jeans is $\frac{3}{6} = \frac{1}{2}$. The probability of selecting a red T-shirt is $\frac{3}{6} = \frac{1}{2}$. The probability of selecting blue socks, blue jeans, and a red T-shirt is $\frac{2}{5} \times \frac{1}{2} \times \frac{1}{2} = \frac{2}{20} = \frac{1}{10} = 10\%$.