Name	Date	Class
Additional Practice		Investigation 4
• • • • • • • • • • • • • • • • • • • •	•••••••••••••••••••••••••••••••••••••••	Data Distributions
<b>1</b> Are wood coasters longer than steel coas	ters? Use the Roller Coaster	

- Are wood coasters longer than steel coasters? Use the Roller Coaster Database and graphs below to help answer the question. Use these strategies and others that make sense to you:
  - **a.** Compare statistics (ranges, medians, means) for each type of roller coaster.

**b.** Partition the distributions at benchmark lengths and look at the percents of each type of roller coaster at and above or below this speed. For example, for *length* you could look at the percent of wood and percent steel roller coasters with lengths at and above or below 1,000 ft, 2,000 ft, 3,000 ft, 4,000 ft, and so on.



Name	Date	Class
Additional Practice (continued)		Investigation 4
		Data Distributions
<b>2.</b> Look at the graph showing track length and duration	of rides for 150	coller

coasters. Write three observations about the relationship between track length and duration of ride.



## **Roller Coasters: Track Length and Duration of Ride**

## Additional Practice (continued)

Name

- **3. a.** Use the table. When was the difference in numbers of boys and girls the greatest? The least?
  - **b.** When was the difference in the percent of boys and girls the greatest? The least?
- 4. Edwin was playing a game but wondered if the number cubes he was using were fair. He rolled the suspicious number cubes 36 times and found the sum of the two numbers on the top faces. Then he compared the results to rolls of fair number cubes that
- had been completed in his mathematics class.





**a.** Write three statements comparing the distribution of sums for the two sets of number cubes.

**b.** Do you think the suspicious number cubes are fair? Explain your answer.

## Investigation 4

**Data Distributions** 

**Participation in Scouts** (millions)

Class

	Boys	Girls
1970	4.7	3.2
1975	3.9	2.7
1980	3.2	2.3
1985	3.8	2.2
1990	4.3	2.5
1995	4.3	2.5