	Adventure	Comedy	Drama	Total
9th Graders	$\frac{39}{162} = 24\%$	$\frac{91}{162} = 56\%$	$\frac{32}{162} = 20\%$	$\frac{162}{162} = 100\%$
10th Graders	50%	36%	14%	$\frac{157}{157} = 100\%$
11th Graders	41%	30%	29%	$\frac{138}{138} = 100\%$
12th Graders	37%	24%	39%	$\frac{102}{102} = 100\%$
Total	38%	38%	24%	$\frac{559}{559} = 100\%$

The relative frequencies show that in three of the four grades, the type of movie with the most votes was adventure. Even though more people voted for comedy overall, if the survey had included equal numbers of people from each grade, it is likely that adventure would have the most votes.

Based on these results, the best type of movie to show is adventure.

## LESSON PRACTICE

## **Answer Key**

- 1. B
- 2. C
- 3. D
- 4. C
- 5. A
- 6. C 7.

	Hardcover	Paperback	Total
Fiction	9	9	18
Nonfiction	10	2	12
Total	19	11	30

	Hits	Walks	Outs	Total
Right-handed Pitchers	25%	10%	65%	100%
Left-handed Pitchers	29%	14%	57%	100%
Total	26%	11%	63%	100%

9. D, E

10. The first table shows the percent of each blood type as a percent of the total population of the survey. For example, 39% of all those in the population have blood that is type O and Rh positive. The table shows clearly that a majority of the people in the population are either O positive or A positive. The second table shows the conditional frequencies of each Rh factor as a percent of the total for each blood type. This table shows that a majority of people of each blood type are positive, but that a larger percent of people with the AB blood type are Rh negative than for other blood types.

## 11. Part A

	Jackson	Smith	Wong	Total
Dogwood County	41%	25%	34%	100%
Green County	24%	37%	39%	100%
Reed County	33%	31%	36%	100%
Total	36%	29%	35%	100%

Part B Wong won the election. Students could use either table to justify their answer. Sample answer: I used the two-way frequency table to determine that Jackson won Dogwood County. However, Wong won Green County and Reed County, so Wong won the election by winning two of the three counties.

Part C Sample answer: two-way relative frequency table by rows; By examining the last row of the table, you can quickly identify the percent of the total vote that each candidate received.