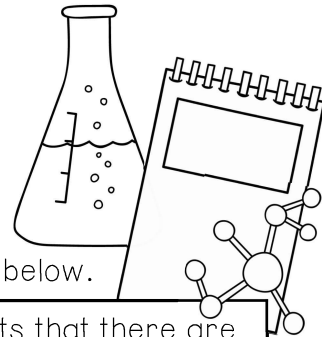


# APPLICATION OF PERCENTS

Marcy completed a science assignment and got 16 out of 20 questions correct. Her assignment last week had 16 out of 18 questions correct. Kai says that since she got 16 questions correct on both assignments, she should be given the same grade on the assignments.

a. What would be the best way to determine if Kai's reasoning is correct or not?

a. Is Kai correct or incorrect? Justify your thinking.



Use a percent proportion or a percent equation to set up and solve the problems below.

1. The seventh grade class held an end of the year dance. Of the 300 seventh graders, 246 decided to attend. What percent of the seventh grade class attended the end of the year dance?

Set Up: \_\_\_\_\_

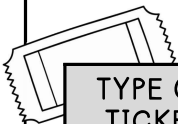
Solution: \_\_\_\_\_

2. The campus registrar reports that there are 480 upperclassmen enrolled at Lee High School. This represents 64% of the student body. How many students are enrolled?

Set Up: \_\_\_\_\_

Solution: \_\_\_\_\_

3. If 480 movie tickets were sold on Saturday, how many were child tickets?



TYPE OF TICKET	% OF TICKETS SOLD
Child	15%
Adult	75%
Senior	10%

Solution: \_\_\_\_\_

4. Fresh Farms divides the farm into different crops shown in the table below. What percent of the farm grows potatoes?

CROP	# OF ACRES
Potatoes	32
Carrots	24
Onions	40

Solution: \_\_\_\_\_

Use your understanding of percentages to answer the questions below.

5. Jed owns a music store and is taking inventory to prepare for a new order. He has organized the number of instruments in the table below. Help Jed analyze his store and place an upcoming order.

	STRING INSTRUMENTS	PERCUSSION INSTRUMENTS	WIND INSTRUMENTS	BRASS INSTRUMENTS
CURRENT INVENTORY	65	90	159	186

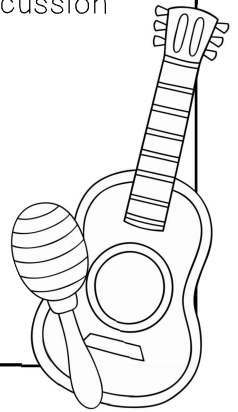
a. Find the percent of the store that each category of instruments comprises:

String Instruments: \_\_\_\_\_ Percussion Instruments: \_\_\_\_\_

Wind Instruments: \_\_\_\_\_ Brass Instruments: \_\_\_\_\_

b. Based on previous sales, Jed determines that he would like to order 30% more percussion instruments. How many more percussion instruments should Jed order?

c. After the order arrives, Jed has a total of 130 string instruments. What percent of his string instruments are new?



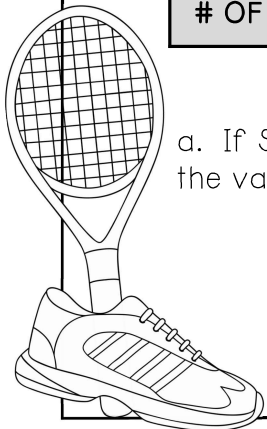
6. Southbrook Middle School tabulates the number of students who participate in the school athletic program. They have displayed the percentage of students who participate in the table below.

	NO PARTICIPATION	ONE SPORT	TWO SPORTS	THREE OR MORE SPORTS
# OF STUDENTS	12%	42%	28%	18%

a. If Southbrook Middle School has 850 students, then how many students participate in the various number of sports?

No Participation: \_\_\_\_\_ One Sport: \_\_\_\_\_

Two Sports: \_\_\_\_\_ Three or More Sports: \_\_\_\_\_



Summarize today's lesson:

## APPLICATION OF PERCENTS

Match each correct answer to a letter and complete the riddle below.

<p><b>1</b> A toy manufacturer estimates that 6% of its products are defective. If 550 toys are produced in one day, how many will be defective?</p>	<p><b>5</b> Mr. Hollins determines that he gives away \$800 each month. If he gives away 16% of his budget, how much is his overall budget?</p>
<p><b>2</b> Fourteen percent of the town's population is over the age of 65. If there are 320 residents over the age of 65, approximately what is the town's population?</p>	<p><b>6</b> Eddie is reading a novel for English class. He has read 173 out of 480 pages. About what percent of the book has he read?</p>
<p><b>3</b> The LA Dodgers hit the most homeruns in 2014. The number of homeruns accounted for 6% of the entire Major League Baseball homerun count. If 583 total homeruns were hit, approximately how many did the LA Dodgers hit?</p>	<p><b>7</b> A nutrition label states that there are 36g of carbohydrates in each serving. This accounts for 12% of the daily value. How many grams of carbohydrates are recommended per day?</p>
<p><b>4</b> Two of the dozen eggs in a carton are cracked. About what percent of the carton is cracked?</p>	<p><b>8</b> About 56% of the 2,553 students are enrolled in at least one honors class. How many students are enrolled in an honors class?</p>

T: 33	O: 25	C: 36	J: 4	M: 517
K: 64	Q: 65	L: 2,286	A: 35	P: 4,559
H: 128	G: 16.7	I: 800	E: 300	R: 5,000
V: 45	N: 1,430	S: 80	D: 1,129	B: 18.7

**WHAT DO YOU CALL A DESTROYED ANGLE?**

\_\_\_\_\_

3                      5                      7                      6                      1                      3                      8                      4                      2                      7