



$$I = prt$$

(Front)

<b><i>I</i></b>	My Definition:	My Representation:
<b><i>p</i></b>	My Definition:	My Representation:
<b><i>r</i></b>	My Definition:	My Representation:
<b><i>t</i></b>	My Definition:	My Representation:



$I = prt$   
(Back)

***Interest***

***principal***

***rate***

***time***



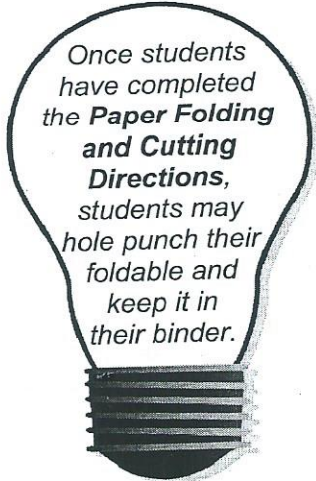
## Application Problems Using Percents, Activity 5

### Activity Objective

The student will define interest, principal, rate, and time.

### Materials

- Paper Folding and Cutting Directions
- $I = prt$  (copy two-sided, front to back)—one per student
- Scissors
- Colored pencils (optional)
- Hole punch (optional)
- Math dictionary (optional)





### Facilitation Questions

- **What are some situations where you have to pay interest?**  
*Answers may vary. Possible answers: car loan, home loan, credit card*
- **What are some situations where you earn interest?**  
*Answers may vary. Possible answers: saving account, annuity*
- **How could you represent the amount of money borrowed or invested with a picture?**  
*Answers may vary. Possible answer: I could draw a picture of the bank giving me money, and I give them an IOU.*
- **Which variable represents the amount of money you earn or pay? The amount of money you borrow or invest? The rate? The time?**  
*I represents the amount of money you earn or pay. p represents the amount of money you borrow or invest. r represents the interest rate. t represents the time in years.*

### Answers

*Answers may vary. Possible answer:*

<b><i>I</i></b>	<p><b>My Definition:</b> <i>Interest is the amount of money earned if you invest money or the amount of money you owe if you borrow money.</i></p>	<p><b>My Representation:</b> <math>I = prt</math></p>
<b><i>p</i></b>	<p><b>My Definition:</b> <i>Principal is the amount of money you invest or the amount of money you borrow.</i></p>	<p><b>My Representation:</b> </p>
<b><i>r</i></b>	<p><b>My Definition:</b> <i>The rate is the percent paid if money is invested during a given amount of time or the percent charged if money is borrowed during a given amount of time.</i></p>	<p><b>My Representation:</b> <math>12\% \rightarrow 0.12</math></p>
<b><i>t</i></b>	<p><b>My Definition:</b> <i>Time is the duration the money is invested or borrowed in years.</i></p>	<p><b>My Representation:</b> </p>

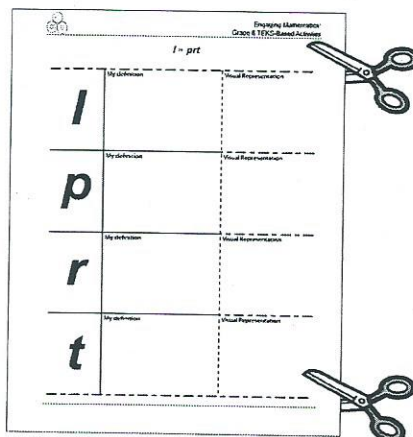




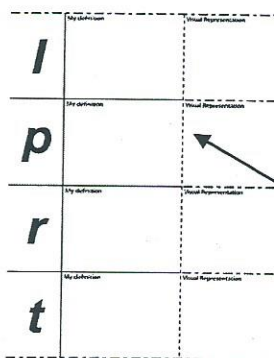
Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Paper Folding and Cutting Directions

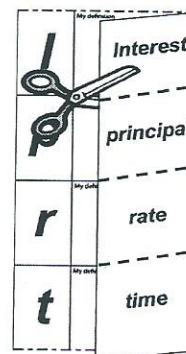
- Cut along the bold (— • — • —) dotted lines on  $I = prt$ .



- Fold and crease along the dotted line.



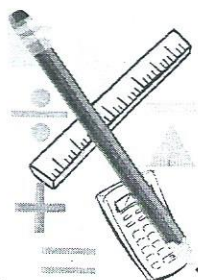
Fold and crease along this dotted line.



- Complete the *My Definition* and *My Representation* section for each vocabulary word.

### Communicating About Mathematics

Describe a situation where you could use the formula for simple interest.




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