

Louisiana Believes.



# Grade 5 Mathematics

**Transitional Curriculum**  
REVISED 2012

**BLACKLINE MASTERS**

LOUISIANA DEPARTMENT OF EDUCATION

*Unit 1, Activity 1, Place Value Chart*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Millions</b>			<b>Thousands</b>			<b>Ones</b>		
hundred millions	ten millions	millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones

*Unit 1, Activity 4, Addition and Subtraction Self-awareness Chart, Page 1*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Word/Phrase</b>	<b>+</b>	<b>√</b>	<b>-</b>	<b>Example</b>	<b>Definition</b>
Altogether					
Decrease					
Difference					
Down					
Earn					
In all					
Increase					
Increment					
Less					

*Unit 1, Activity 4, Addition and Subtraction Self-awareness Chart, Page 2*

<b>Word/Phrase</b>	<b>+</b>	<b>√</b>	<b>-</b>	<b>Example</b>	<b>Definition</b>
Loss					
Minus					
More					
Plus					
Spend					
Sum					
Total					
Up					

**Instructions:**

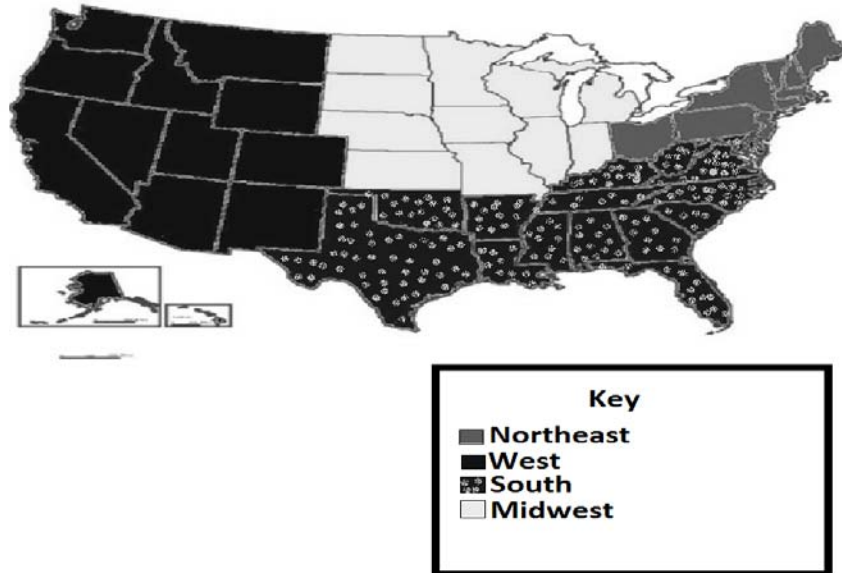
1. Rate your understanding of each word with either a “+” (understand well), a “√” (some understanding), or a “-” (don’t know).
2. As you complete activities during this unit, revisit your chart and fill in examples and definitions in your own words.
3. Your goal is to have all plus signs at the end of the activities with appropriate examples and accurate definitions.

*Unit 1, Activity 7, U. S. Census Bureau Data Sheet*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**U. S. State Regions**



**Problem Prompt:** It is your first day of work at the U. S. Census Bureau. They were impressed with your interview and believe you have the mathematical skills to proof the Census report before it is printed and distributed to the public. They have assembled a Louisiana team to perform the task, and you are one of the members. First, you’ve been asked to check the population change in the “Change” column to make sure the change in population for each region from 2000-2010 is correct. Then, you will give the total population for the entire United States in the year 2010. In addition to this task, you are asked to find the population change for the state of Louisiana and enter that information in the table. You will work with your team in order to complete these tasks.

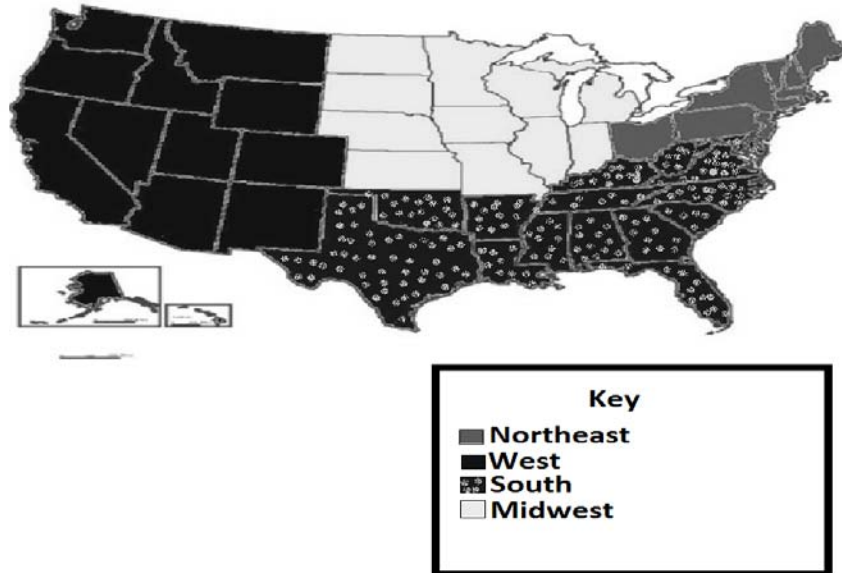
State Region	Population		Change	
	Year 2000	Year 2010	Mark <input type="checkbox"/> if wrong	Place Correct Number Here
Northwest	53,594,378	55,317,240	<input type="checkbox"/> 1,712,872	_____
Midwest	64,392,776	66,927,001	<input type="checkbox"/> 2,534,225	_____
South	100,236,820	114,555,744	<input type="checkbox"/> 214,792,564	_____
West	63,197,932	71,945,553	<input type="checkbox"/> 8,747,521	_____
<b>Total Population</b>	281,421,906	_____		
Louisiana	4,468,976	4,533,372		_____

*Unit 1, Activity 8, U. S. Census Bureau Data Sheet with Answers*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**U. S. State Regions**



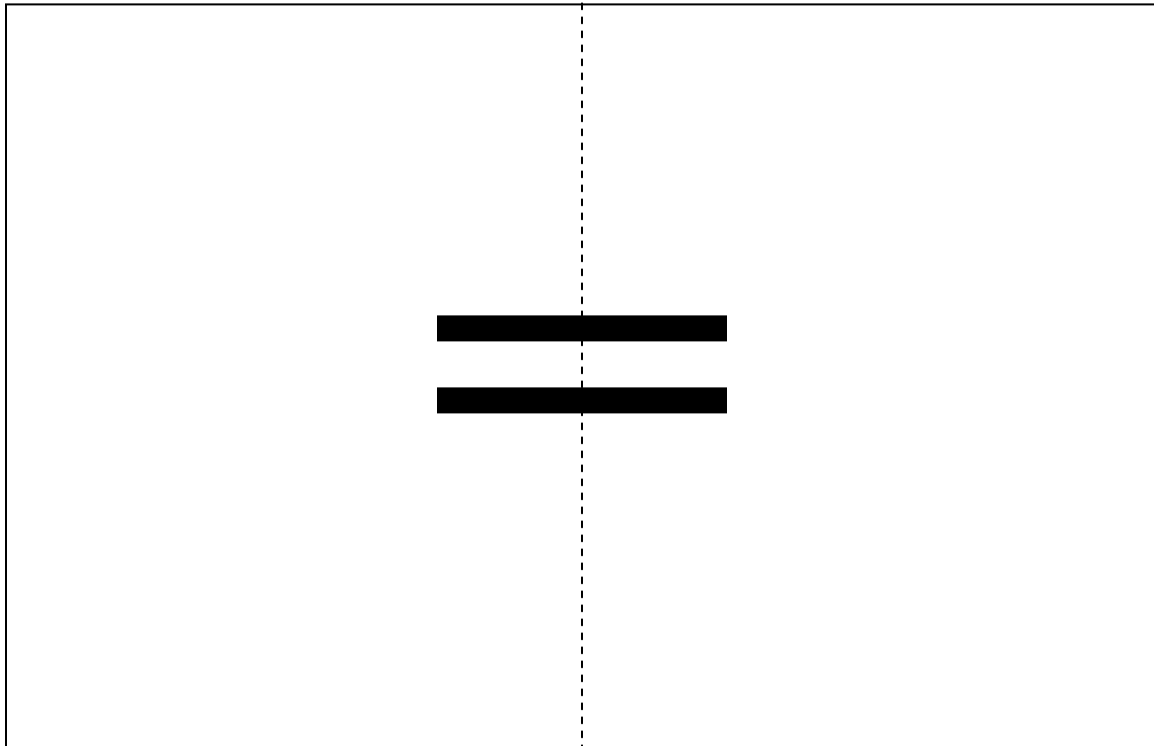
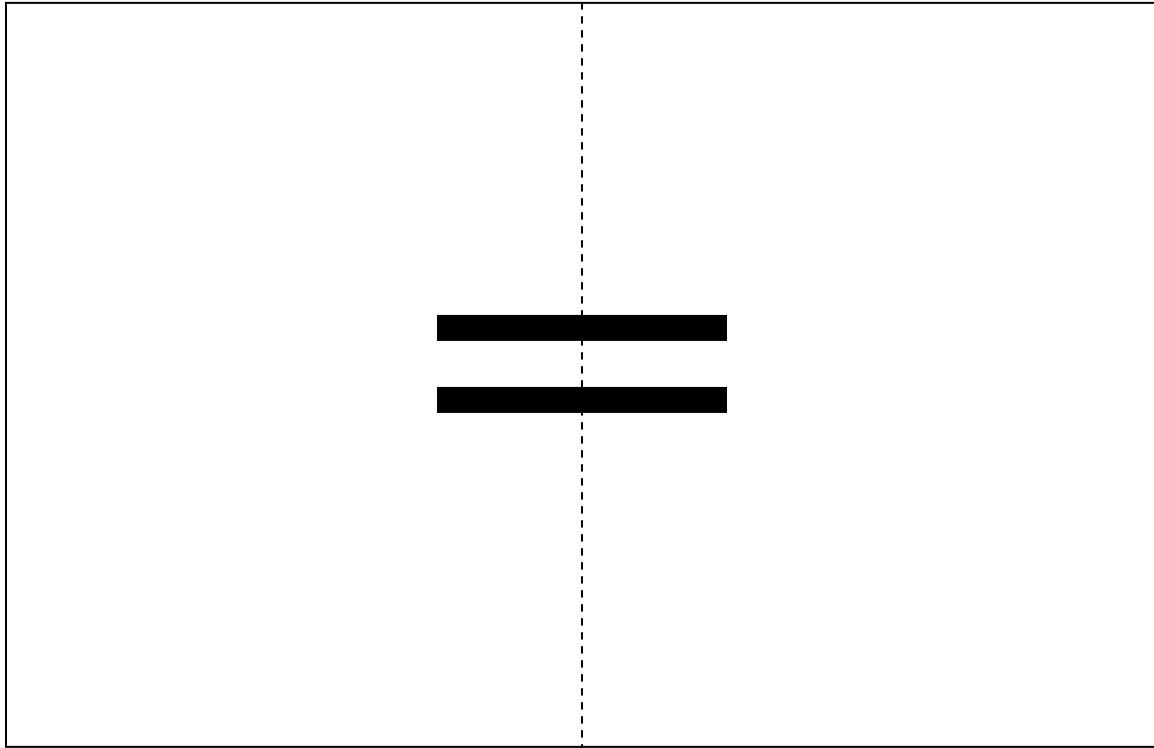
**Problem Prompt:** It is your first day of work at the U. S. Census Bureau. They were impressed with your interview and believe you have the mathematical skills to proof the Census report before it is printed and distributed to the public. They have assembled a Louisiana team to perform the task, and you are one of the members. First, you’ve been asked to check the population change in the “Change” column to make sure the change in population for each region from 2000-2010 is correct. Then, you will give the total population for the entire United States in the year 2010. In addition to this task, you are asked to find the population change for the state of Louisiana and enter that information in the table. You will work with your team in order to complete these tasks.

State Region	Population		Change	
	Year 2000	Year 2010	Mark <input checked="" type="checkbox"/> if wrong	Place Correct Number Here
Northwest	53,594,378	55,317,240	X 1,712,872	<u>1,722,862</u>
Midwest	64,392,776	66,927,001	<input type="checkbox"/> 2,534,225	<u>Correct as is</u>
South	100,236,820	114,555,744	X 214,792,564	<u>14,318,924</u>
West	63,197,932	71,945,553	X 8,747,521	<u>8,747,621</u>
<b>Total Population</b>	281,421,906	<u>308,745,538</u>		
Louisiana	4,468,976	4,533,372		<u>64,396</u>

*Unit 1, Activity 9, Equation Mats*

Name: \_\_\_\_\_

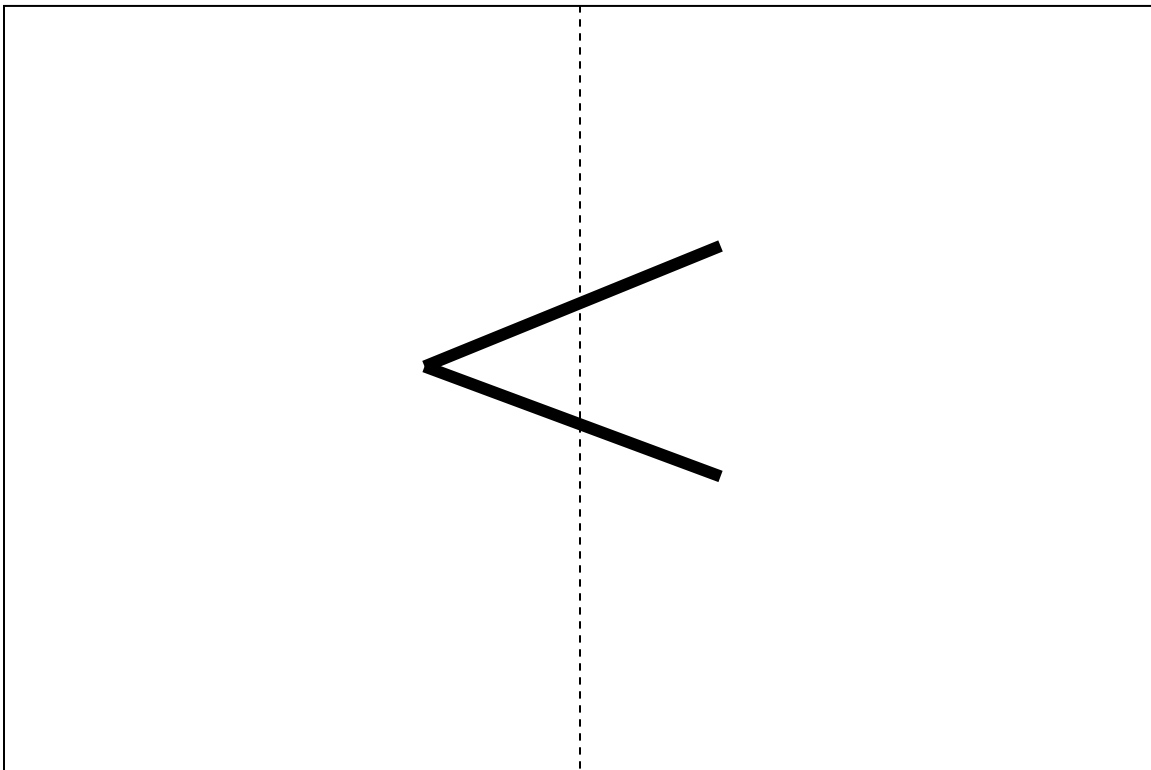
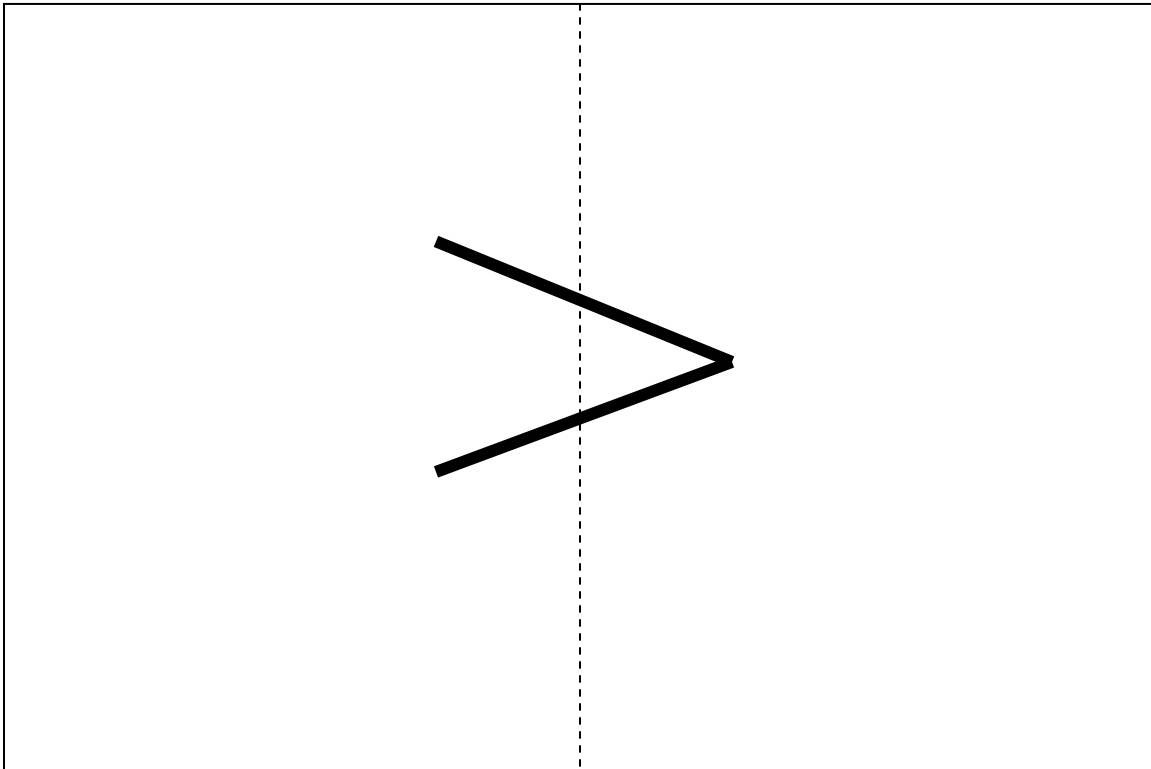
Date: \_\_\_\_\_



*Unit 1, Activity 10, Inequality Mats*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

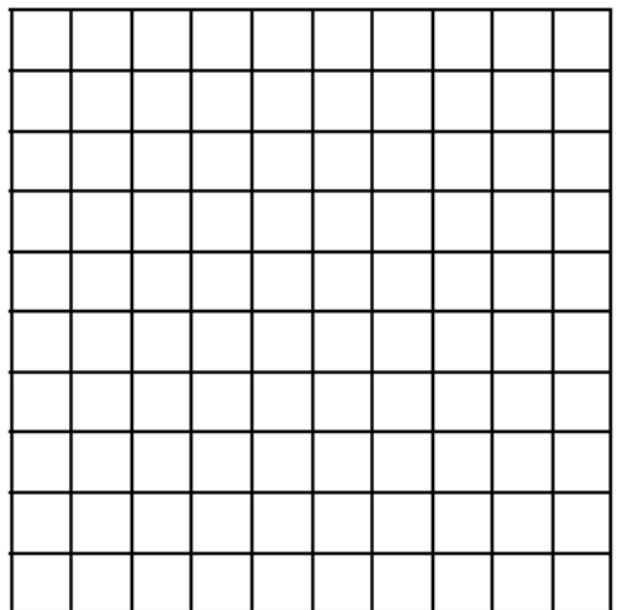
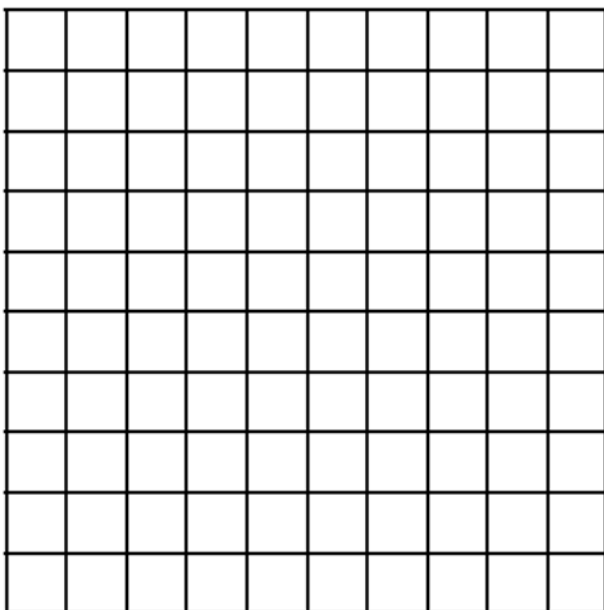
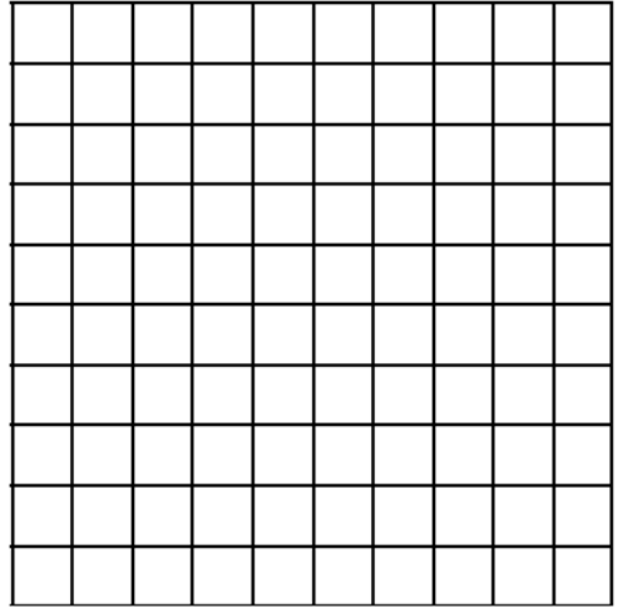
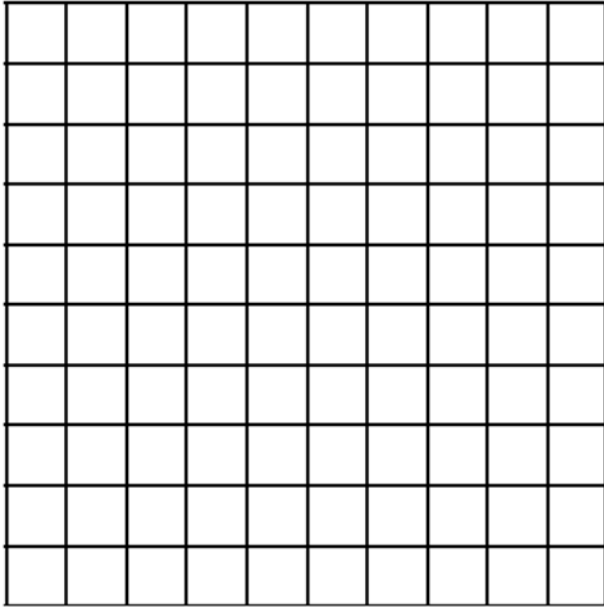




*Unit 1, Activities 10, 16, and 17, Hundreds Grid*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



*Unit 1, Activities 10, 11, and 13, Place Value Chart with Decimals*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Whole Numbers</b>			<b>•</b>	<b>Decimals</b>		
hundreds	tens	ones	•	tenths	hundredths	thousandths

*Unit 1, Activity 12, Place Value Global, Inc. - Example Letter*



## Place Value Global, Inc.

123 Number Way  
Baton Rouge, Louisiana 70810

October 20, 2011

Tim Tenth  
1234 Numeracy Lane  
Number Town, Louisiana 12345

Dear Mr. Tenth:

We sincerely thank you for your interest in our company. We realize you have the ability to hold your place and you give the value of tenth to any digit that stands in your place. We also understand that you have the ability to adjust to having a value of more than nine in your place by giving the extra one tenth to the ones place.

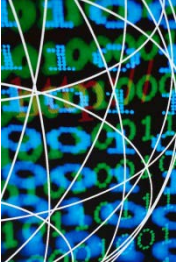
We are sorry to inform you that we are not able to extend an offer to you at this time. We are pursuing a candidate who more closely fits our job requirements. Your value is a tenth of a whole. In order to adequately fill the position you would have to be 10 times the size you are currently. You are currently under-qualified to be considered a candidate at this time.

Although you do not qualify for this opening, we encourage you to watch the bulletins, television, newspaper and website ads for openings that may be applicable to your skills.

We wish you well in your job searching.

Sincerely,

Nancy Number-Scouter  
Human Resource Manager



**Place Value Global, Inc.**

123 Number Way  
 Baton Rouge, Louisiana 70810

\_\_\_\_\_

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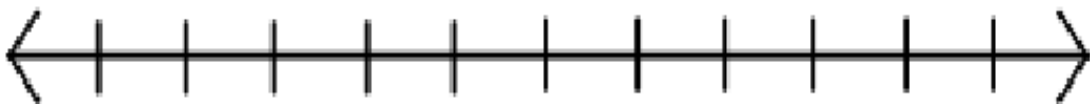
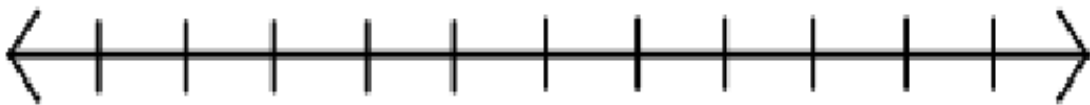
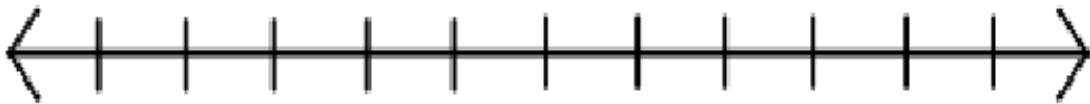
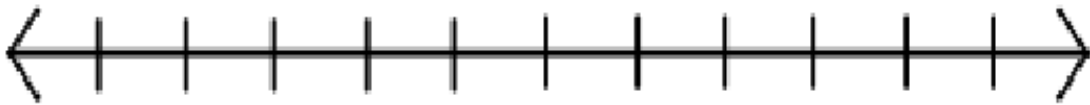
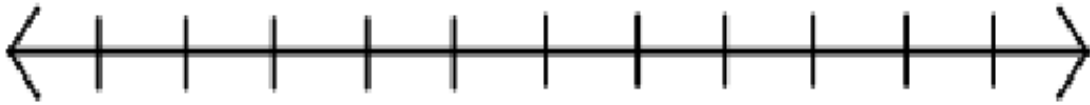
\_\_\_\_\_

\_\_\_\_\_

*Unit 1, Activity 13, Number Lines*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



**Unit 1, Activity 15, Probable Comparisons**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

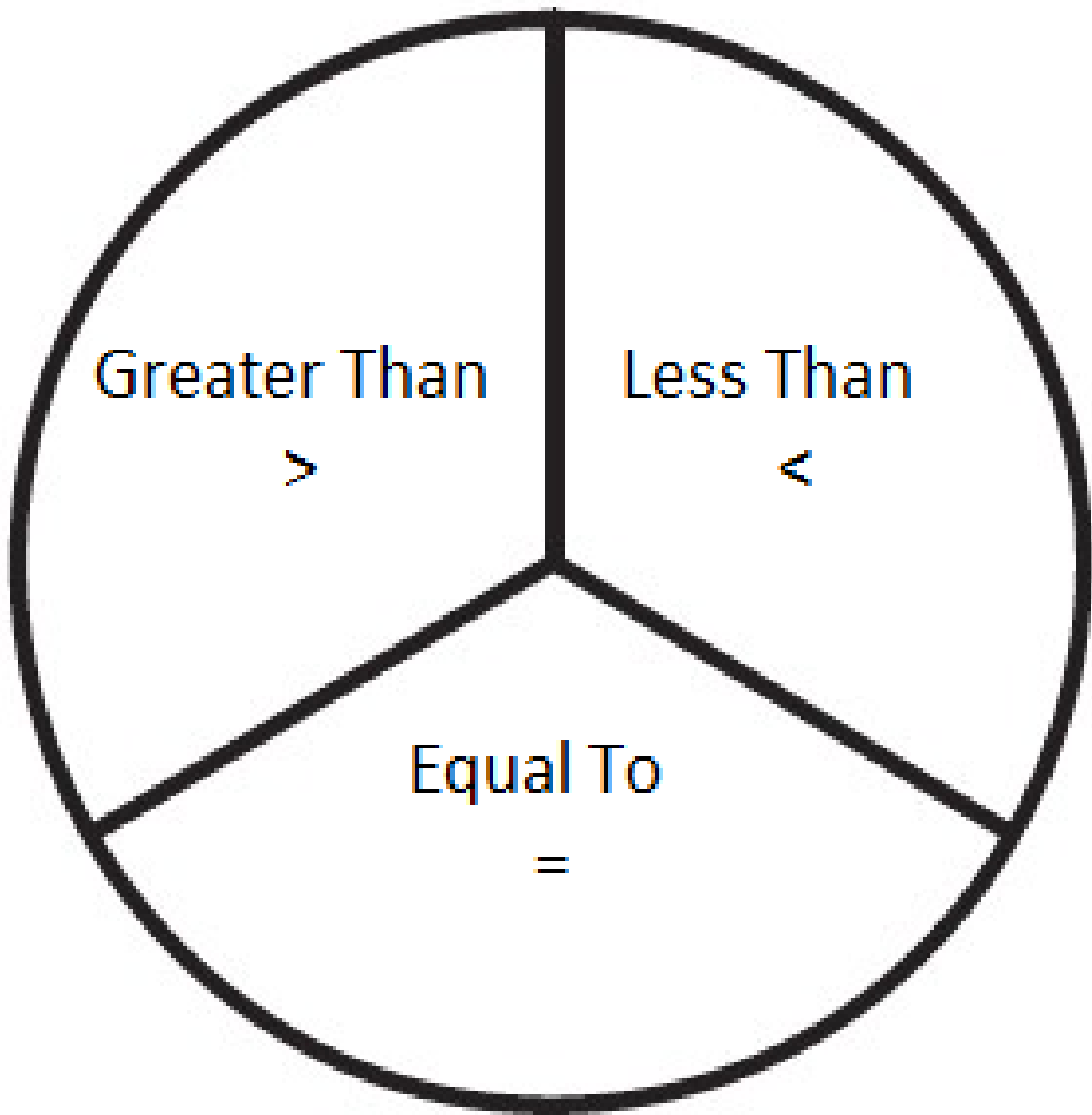
Directions: Take turns spinning the Spinner. Use the decimals on this sheet to compare. When the comparison is spun, choose two of the three decimals in the set to compare and write the comparison. For example: If you spin “<,” you could write “10.02 < 10.03.” You must agree on the comparison. Move on to the next set of decimals taking turns until all sets are completed.

Set	Comparison Spun	Decimals Chosen to Compare
<i>EXAMPLE</i> 10.03, 10.02, and 10.030	<i>less than &lt;</i>	<i>10.02 &lt; 10.03</i>
35.689, 35.625, and 35.6890		
3.44, 3.49, and 3.490		
10.200, 10.20, and 10.13		
1.99, 2.85, and 2.850		
0.21, 0.43, and 00.43		
52.4058, 52.5048, and 52.50480		
102.987, 101.698, and 101.6980		
7.304, 7.3400, and 7.340		

*Unit 1, Activity 15, Probable Comparisons*

0.788, 0.971, and 00.971		
0.212, 0.906, and 0.2120		

*Unit 1, Activity 15, Probable Comparisons Spinner*





*Unit 2, Activity 1, Learning Log*

Learning Log  
of \_\_\_\_\_

Date:

Assignment:

Before and during reading, I made one or more predictions:

While reading, I discovered that my predictions were supported because of this evidence:

While reading, I discovered that my predictions were not supported because of this evidence:

Questions I had while reading:

New understandings discovered during reading:

New vocabulary discovered during reading:

Connections to other things I know about:

Reflections:

*Unit 2, Activity 8, Vocabulary Self-Awareness Chart*

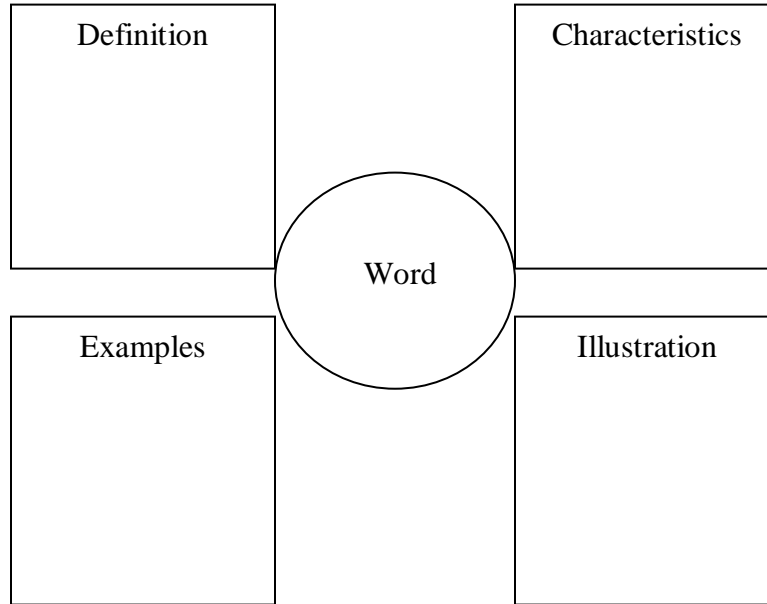
**Vocabulary Self-Awareness Chart**

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

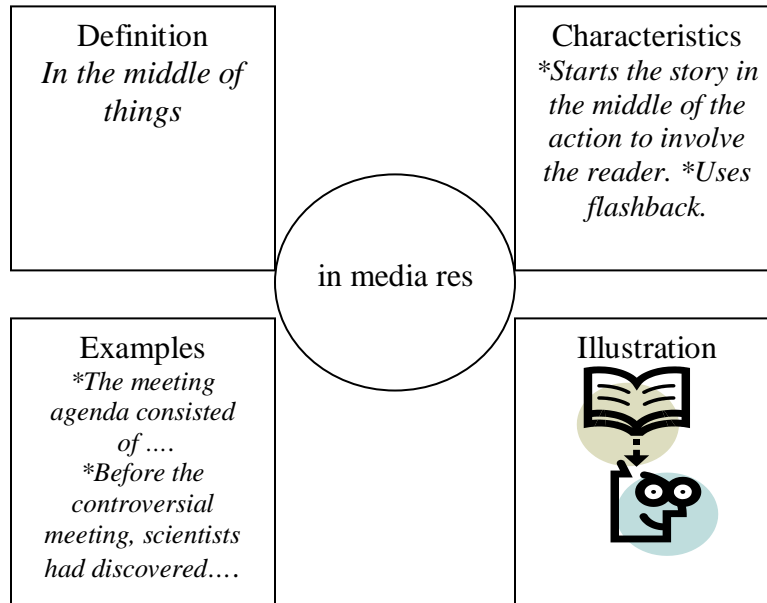
<b>Word</b>	<b>+</b>	<b>√</b>	<b>-</b>	<b>Example</b>	<b>Definition</b>
lead paragraph					
body					
conclusion					
details					
clarity					
headline					
byline					
photo caption					
headings					
subheadings					
indentations					
bullets					

*Unit 2, Activity 9, Vocabulary Card Template*

**Vocabulary Card Template**



Sample Vocabulary Card



## *Unit 2, Activity 10, Opinion Questions*

### *Opinion Questions*

1. Should students be required to wear uniforms to school?
2. Do students learn better working alone or in groups?
3. Is homework an important part of learning?
4. At what age should a teenager be allowed to go to the mall or a movie without a parent?
5. What age should a person be when receiving his/her first cell phone?
6. How much money should a ten year old receive in a weekly allowance?
7. Why do you think young people attempt to solve problems through violence?
8. Is it better to be an only child or have siblings?

Note: These are suggested questions. Other teacher-generated questions may be used to complete this activity, based upon relevance to students.

**Unit 2, Activity 10, Support Your Opinion**

Name \_\_\_\_\_

Date \_\_\_\_\_

**Support Your Opinion**

**Directions:** As the teacher asks each question, write down your opinion on the topic. List two facts or details to support each opinion. Use words or phrases, such as *consequently* and *specifically*, to link your facts and details to your opinion.

<b>Opinion</b>	<b>Facts or Details to Support the Opinion</b>
1.	#1 – #2 –
2.	#1 – #2 –
3.	#1 – #2 –
4.	#1 – #2 –
5.	#1 – #2 –
6.	#1 – #2 –

*Unit 2, Activity 11, Three-Column Chart*

**Three-Column Chart**

Title of Article:			
TOPIC	DETAILS	RESPONSE	
		Classmates	Mine
Main Idea:			
Facts: #1-			
#2-			
More-			
Opinions: #1-			
#2-			
More-			
Final Response:			

*Unit 2, Activity 11, Characteristics of Opinion Articles*

Name \_\_\_\_\_ Date \_\_\_\_\_

*Characteristics of Opinion Articles*

**Directions:** Place a check by each characteristic that can be found in your opinion article. Give an example of each characteristic.

<b>Characteristic</b>	<b>Check</b>	<b>Example</b>
A position, stance, or point of view is clearly stated in the opinion article.		
Ideas are logically ordered.		
Ideas support the author's purpose for writing.		
Facts and details are used to support the author's opinion.		
Opinions and reasons are linked using words, phrases, and clauses.		
A concluding statement supports the author's opinion.		

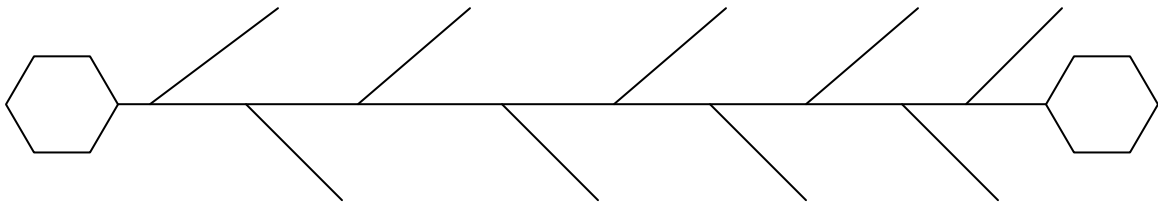
***Unit 3, Activity 12, Timeline***

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**TIMELINE**

Directions: Complete the timeline by identifying important events in a selected person's life. First, record the name of the person selected, date and place of birth in the hexagon on the left. On each diagonal line describe briefly one event. Record the date and place of death in the hexagon on the right.





*Unit 3, Activity 13, Questioning the Content Guide*

**Questioning the Content**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Goal</b>	<b>Query</b>
Initiate discussion.	What is the content about?  What is the overall message?  What is being talking about?
Focus on content's message.	It says this, but what does it mean?  Why was this word used?
Link information.	How does that connect with what was said earlier?  What information has been added here that connects or fits in with _____?
Identify problems with understanding.	Does that make sense?  Does the timeline of events make sense?  Is this explained clearly? Why or why not?  What do we need to figure out or find out?
Encourage students to refer to the text to find support for interpretations and answer to questions.	Did the content tell me that?  Did the source provide the answer to that?

*Unit 3, Activity 15, Autobiography Planning Sheet*

**Autobiography Planning Sheet**

Name \_\_\_\_\_ Date \_\_\_\_\_

Information Prompts	Information
Person's name, date of birth, and birthplace	
Personal Background (i.e., Where have you lived? How many people are in your family? Are you the oldest, middle, youngest child, or an only child? Do you have more than one generation living in your household?)	
Personality Traits (What words best describe your personality? How do other people describe you?)	
Significance (i.e., What is something that you have done that you think is important in relation to other people? What is one skill that makes you unique?)	
Biggest Obstacle (i.e., What has been the most challenging event of your life? Why has it been so difficult?)	
Favorite Phrase	

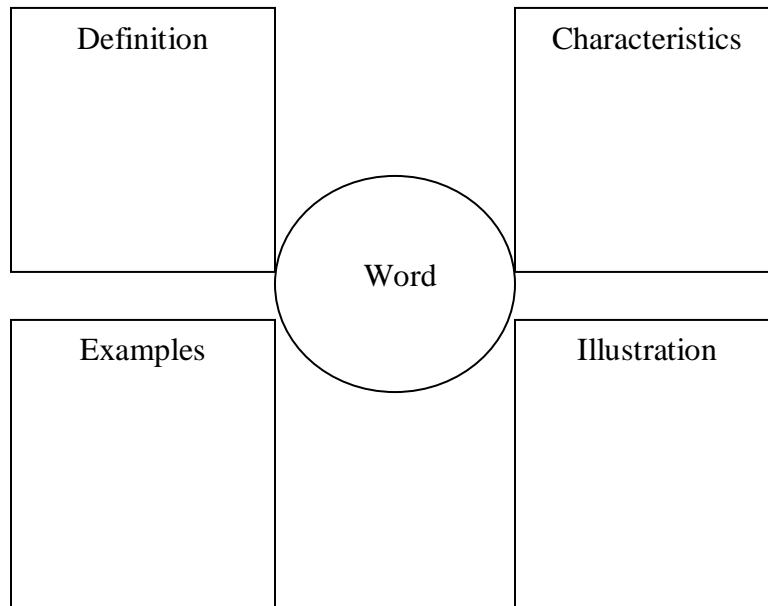
**Unit 3, Activity 16, Creating an Autobiography Mobile**

**Mobile Rubric**

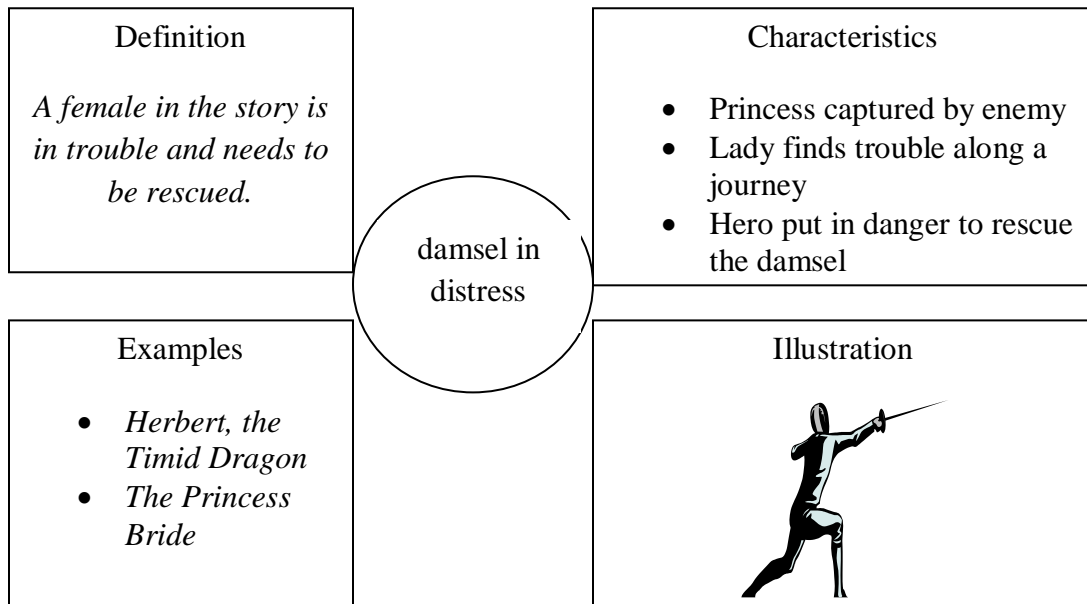
<b>Exceeds Expectations 5 points</b>	<b>Meets Expectations 3 points</b>	<b>Approaches Expectations 1 point</b>
Pictures reflect location of birth, location of school, location pertinent to life.	Pictures reflect some of the following: location of birth, location of school, location pertinent to life.	Pictures do not reflect important events in life of person.
Pictures are clear and easily visible.	Pictures are relatively clear and partially visible.	Pictures are not clear and easily visible.
Pictures relate to contributions of person.	Pictures relate somewhat to contributions of person.	Pictures do not relate to contributions of person.
Dates reflect major events or transition points in the person's life.	Dates reflect either major and minor events or transition points in the person's life.	Dates do not reflect major events or transition points in the person's life.
Dates that are selected help to tell the story of the person's life.	Dates that are selected aid in understanding most of the story of the person's life.	Dates do not relate the story of the person's life.
Dates are easily visible.	Dates are reasonably visible.	Dates are not easily visible.
Vocabulary or key words reflect contributions, quotes, personal phrases, achievements, characteristics, etc.	Vocabulary or key words moderately reflect contributions, quotes, personal phrases, achievements, characteristics, etc.	Vocabulary or key words do not reflect contributions, quotes, personal phrases, achievements, characteristics, etc.
Vocabulary or key words chosen reflect human qualities or traits emphasized in the report.	Vocabulary or key words chosen reflect to some extent the human qualities or traits emphasized in the report.	Vocabulary or key words chosen do not reflect human qualities or traits emphasized in the report.
Vocabulary is easily visible and readable.	Vocabulary is reasonably visible and readable.	Vocabulary is not easily visible and readable.
Maps indicate information that could not have been shown in another manner.	Maps reasonably indicate information that could not have been shown in another manner.	Maps fail to indicate needed information.
Maps are clear and easily visible.	Maps are moderately clear and visible.	Maps are not clear and easily readable.

*Unit 4, Activity 12, Vocabulary Card Template*

*Vocabulary Card Template*



*Vocabulary Card Sample*



**Unit 4, Activity 13, Activity-Specific Assessment, Identification of Theme Table**

**Identification of Theme Table**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Directions:** To begin, use the following table to record information about each short story title read. You may refer to the list created in your learning log. Next, determine the main theme of each story read. Locate and list one or more quotes to support your identification of theme.

<b>Title</b>  (List title and subtitle, if available)	<b>Author</b>  (List last name, first name)	<b>Theme</b>  (List the most important theme of the short story)	<b>Quotes</b>  (List one or more quotes to support the identified theme. Include the page number on which you found the quote.)

*Unit 4, Activity 14, Structuring a Comparison Contrast Essay*

**Comparing and Contrasting Two Adventure Stories**

	<b>Story 1 -</b>	<b>Story 2 -</b>
<b>Characters:</b> Note the similarities and differences in the main characters' physical descriptions, thoughts, feelings, words, actions, and response by and toward other characters in the story.		
<b>Settings:</b> Where does each story take place? How does the setting of each story affect the development of events?		
<b>Events:</b> List the main events from each story, noting similarities and differences.		
<b>Conflicts:</b> Explain the internal and external conflicts of each story. Describe how the conflicts from each story are similar and different.		
<b>Themes:</b> What are the common themes in the stories? What is different about the story themes?		

## *Unit 5, Activity 7, Poetry Anticipation Guide*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### **Poetry Anticipation Guide**

**Directions:** After each statement, write “agree” or “disagree.” Then in the space provided, briefly explain your answer using examples from the displayed poems and poet biographies.

1. Poetry was one of the earliest forms of writing. \_\_\_\_\_

Your reasons:

2. Poems tell stories, describe scenes, capture a mood, and can be humorous. \_\_\_\_\_

Your reasons:

3. Poems can be placed in 3 main categories. \_\_\_\_\_

Your reasons:

4. Narrative poetry tells a story. \_\_\_\_\_

Your reasons:

5. Dramatic poetry describes a scene or a setting. \_\_\_\_\_

Your reasons:

6. Shel Silverstein writes humorous poems. \_\_\_\_\_

Your reasons:

7. All poems rhyme. \_\_\_\_\_

Your reasons:

8. Poems are written in paragraphs. \_\_\_\_\_

Your reasons:

*Unit 5, Activity 8, Vocabulary Self-Awareness Chart*

**Vocabulary Self-Awareness Chart**

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

<b>Word</b>	<b>+</b>	<b>√</b>	<b>-</b>	<b>Example</b>	<b>Definition</b>
word choice					
imagery					
mood					
tone					
style					



*Unit 5, Activity 9, Poetry Process Guide*

**Poetry Process Guide**

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

**Directions:** Select one poem. As you read, focus on the author’s use of literary devices. Record your notes and responses on this sheet while reading the poem. Finally, explain how the author’s word choice and use of imagery enhance the mood, tone and style of the poem.

- Word choice:

Impact of word choice:

- Imagery:

Impact of imagery:

- Mood:

Impact of mood:

- Tone:

Impact of tone:

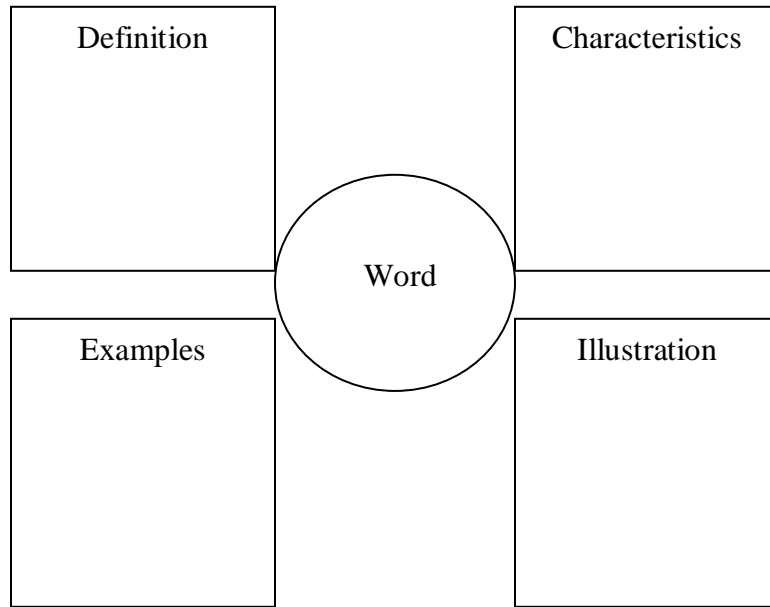
- Style:

Impact of style:

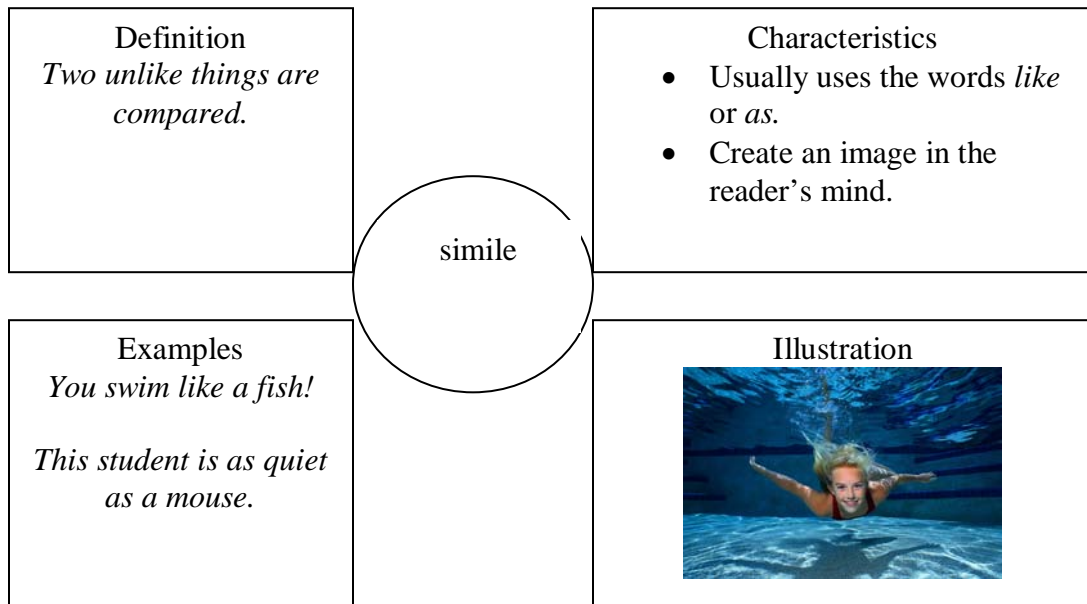
Explain the relationship between the elements you identified. How does this poem appeal to one’s senses?

*Unit 5, Activity 10, Vocabulary Card Template*

**Vocabulary Card Template**



Sample Vocabulary Card



*Unit 5, Activity 11, Figurative Language*

**Figurative Language**

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

**Directions:** Use poems and song lyrics that you have read to identify ten or more examples of each poetic device studied. Then describe how the literary devices and word choice affect the mood of the poem, appeal to the senses, and set the tone of the within a poem or song. Finally, ask peers to check whether you have identified the examples correctly and to provide feedback.

List the poem titles below.	Simile	Metaphor	Personification	Hyperbole	Idioms	Adages	Proverbs	Visual Elements	Impact on mood, tone, and style	Correct Use (initialed by peer)	Feedback
Poem # 1 _____											
Poem # 2 _____											
Poem # 3 _____											
Poem # 4 _____											
Poem # 5 _____											
Poem # 6 _____											

## Unit 5, Activity 12, Analyzing Poetry

### Analyzing Poetry

Directions: Fill in the table below using your poem. Use the information that you gather to write a multi-paragraph composition to analyze your poem.

1. What is the title of the poem?	
2. Who is the author of the poem?	
3. Is this a narrative, lyric, dramatic, or humorous poem? Use text-based evidence to support your answer.	
4. List at least three different types of figurative language used in the poem. Then, cite the figure of speech from the poem, and explain how each relates to the meaning of the poem.	
5. What is the theme of this poem? Use at least 3 text-based pieces of evidence to support your answer.	
6. Are there any visual images that accompany the poem? If so, how do they contribute to the meaning of the text?	
7. Would you recommend this poem to a friend for reading? Use evidence from the poem to support your answer.	

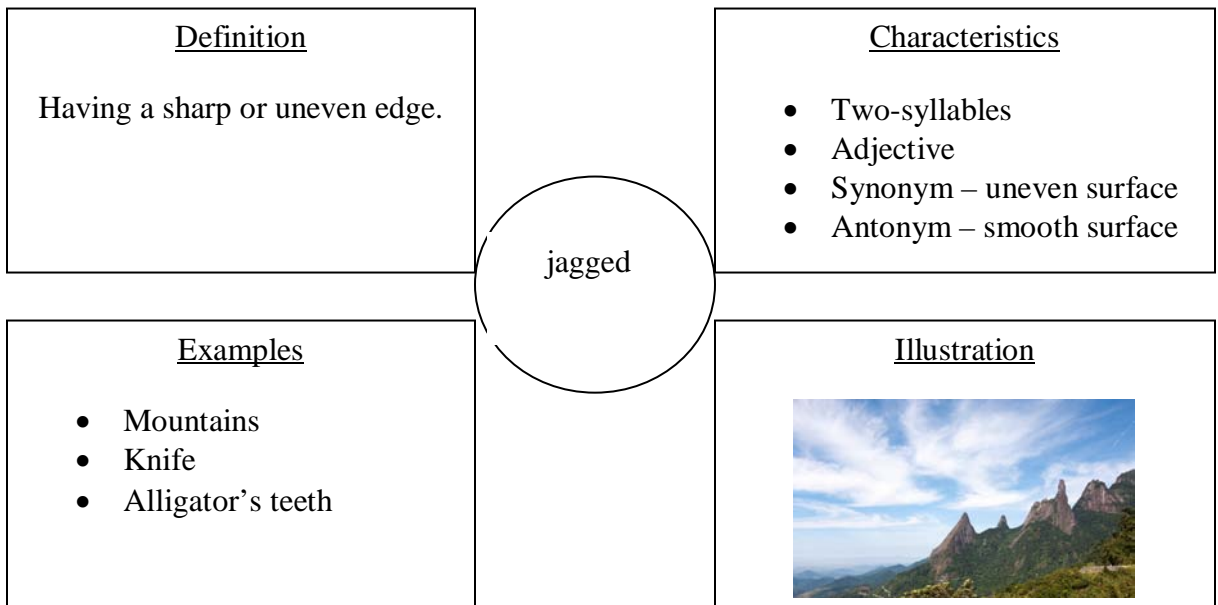
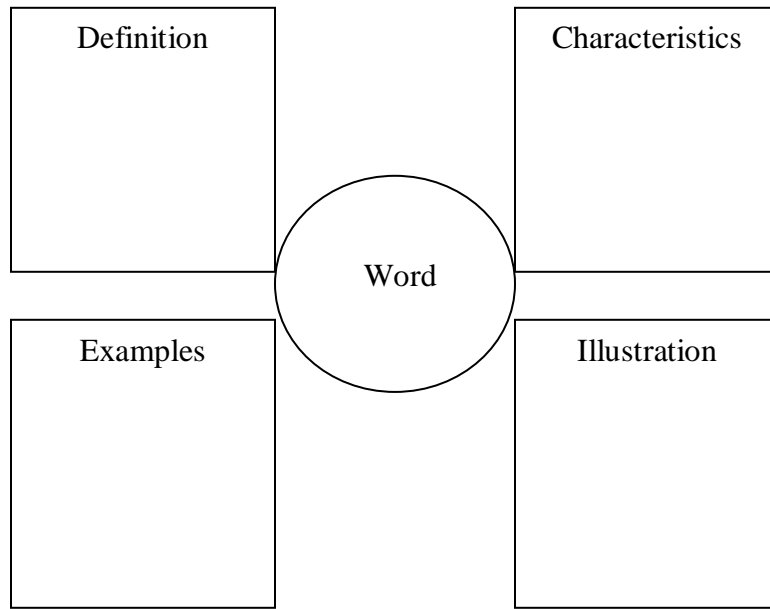
# Unit 6, Activity 9, Vocabulary Self-Awareness Chart

## Vocabulary Self-Awareness Chart

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

<b>Word</b>	<b>+</b>	<b>√</b>	<b>-</b>	<b>Example</b>	<b>Definition</b>

*Unit 6, Activity 9, Vocabulary Card Template*



*Unit 6, Activity 10, Figurative Language in Novels*


<b>Figurative Language</b>	<b>Example from Novel</b>	<b>Impact on Tone, Mood, and Style</b>	<b>Feedback</b>
<b>Simile</b>			
<b>Metaphor</b>			
<b>Personification</b>			
<b>Hyperbole</b>			
<b>Idioms</b>			

*Unit 6, Activity 16, Comparing and Contrasting Settings and Events*


Name \_\_\_\_\_

Novel \_\_\_\_\_

Beginning of Novel	
Setting -	Event -



Middle of Novel	
Setting -	Event -



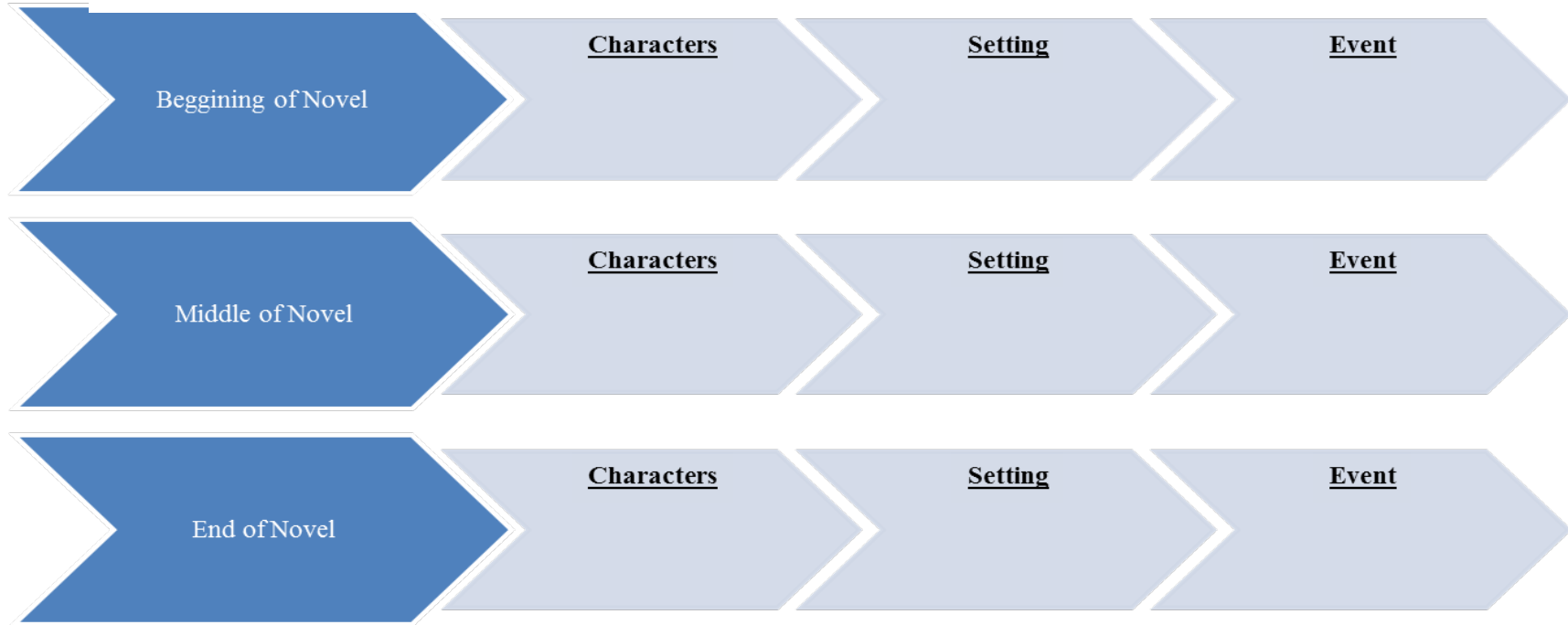
End of Novel	
Setting -	Event -



*Unit 6, Activity 17, Comparing and Contrasting Novels in the Same Genre*

Name \_\_\_\_\_

Novel \_\_\_\_\_



**Unit 2, Activity 1, Multiplication Properties**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Word/Phrase</b>	<b>+</b>	<b>√</b>	<b>-</b>	<b>Example</b>	<b>Definition</b>
Commutative Property					
Associative Property					
Distributive Property					
Identity Property					
Zero Property					

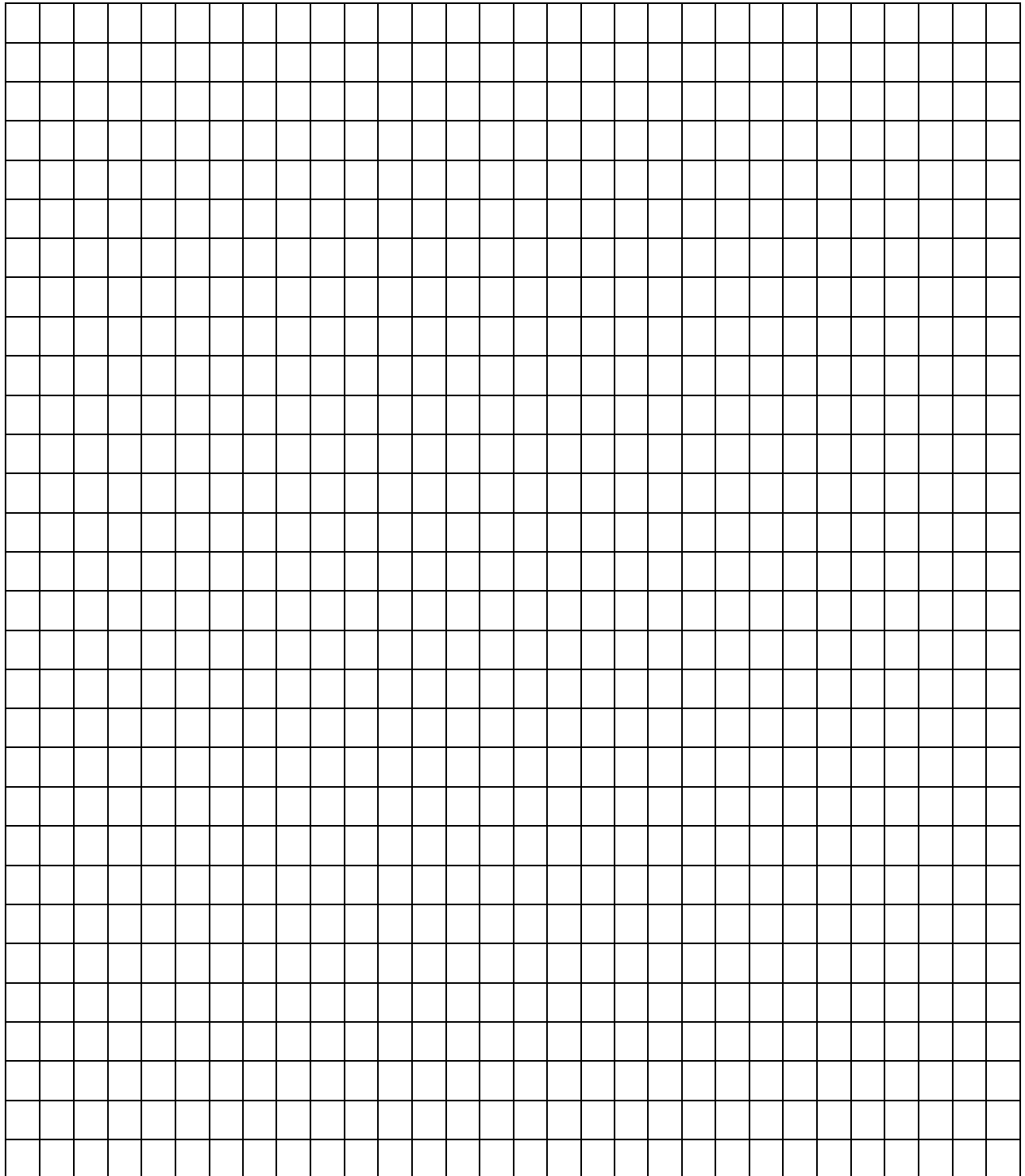
**Instructions:**

1. Rate your understanding of each word with either a “+” (understand well), a “√” (some understanding), or a “-” (don’t know).
2. As you complete activities during this unit, revisit your chart and fill in examples and definitions in your own words.
3. Your goal is to have all plus signs at the end of the activities with appropriate examples and accurate definitions.

*Unit 2, Activities 2 and 9, Grid Paper*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



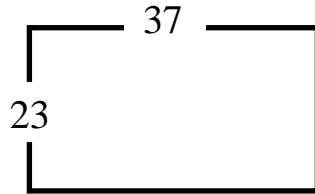
**Unit 2, Activity 4, Area Model of Multiplication**

Name: \_\_\_\_\_

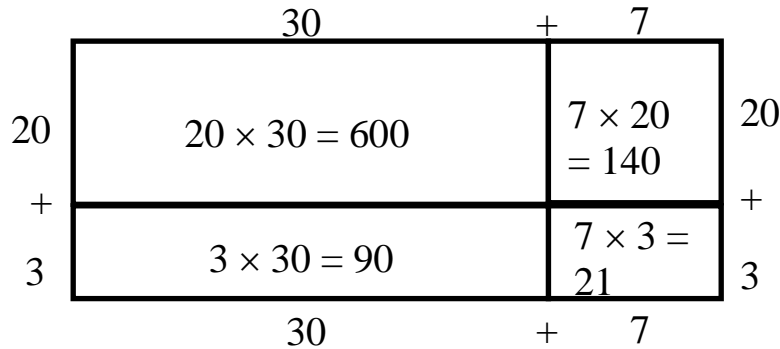
Date: \_\_\_\_\_

**Process Guide: Area Model for Two-digit by Two-digit Multiplication Problems**

1. **Explore:** What would you do to find the area of this rectangle? ( $Area = length \times width$ )



2. Multiplying the length by the width may be difficult to do in one step. Try breaking the rectangle into smaller rectangle sections. This will make the area less difficult to find.



**Explain:** Explain how the smaller rectangle sections of the whole are used to solve the problem.

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3. **Understand:** Answer the following questions to better understand the process.

a. How are the numbers 37 and 23 expressed? Why are they expressed that way?

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b. How can you use what you know about zeros in products to find the partial products in the smaller rectangles?

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**Unit 2, Activity 4, Area Model of Multiplication**

c. Does it matter in what order you multiply to get the partial products? \_\_\_\_\_

d. What do you do with all of the products in each rectangle section to get the total product?

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e. Does it matter in what order you add those products? \_\_\_\_\_

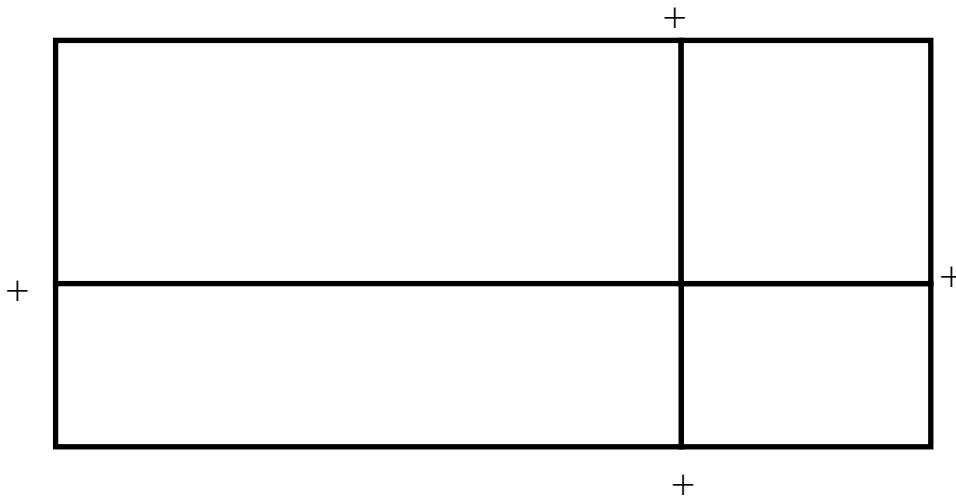
f. **Conclusion:** How is the Area Model of multiplication used to solve the multiplication?

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4. **Apply:** Apply the Area Model of multiplication method to solve  $49 \times 34$ .



5. **Reason:** What is the largest product you can get when you multiply two 2-digit numbers? Explain your reasoning.

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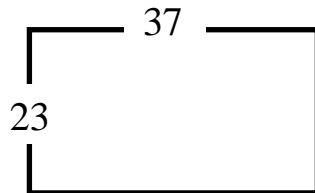
**Unit 2, Activity 4, Area Model of Multiplication with Answers**

Name: \_\_\_\_\_

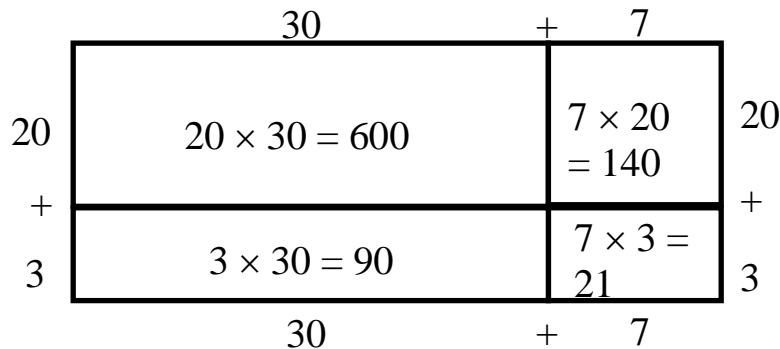
Date: \_\_\_\_\_

**Process Guide: Area Model for Two-digit by Two-digit Multiplication Problems**

1. **Explore:** What would you do to find the area of this rectangle? (*Area = length × width*)



2. Multiplying the length by the width may be difficult to do in one step. Try breaking the rectangle into smaller rectangle sections. This will make the area less difficult to find.



**Explain:** Explain how the smaller rectangle sections of the whole are used to solve the problem.

*Possible answer: The area of each of the four little rectangles is found: these products are added to find the total area.*

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3. **Understand:** Answer the following questions to better understand the process.

- a. How are the numbers 37 and 23 expressed? Why are they expressed that way?

*They are expressed as tens and ones to make the multiplication easier.*

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- b. How can you use what you know about zeros in products to find the partial products in the smaller rectangles?

*Since  $30 \times 20$  has 2 zeros,  $20 \times 7$  has 1 zero, and  $30 \times 3$  has 1 zero.*

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- c. Does it matter in what order we multiply to get the partial products? No

**Unit 2, Activity 4, Area Model of Multiplication with Answers**

- d. What do you do with all of the products in each rectangle section to get the total product?

We add all the products to get the total product.

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- e. Does it matter in what order you add the partial products? No

- f. How is the area model of multiplication used to solve the multiplication?

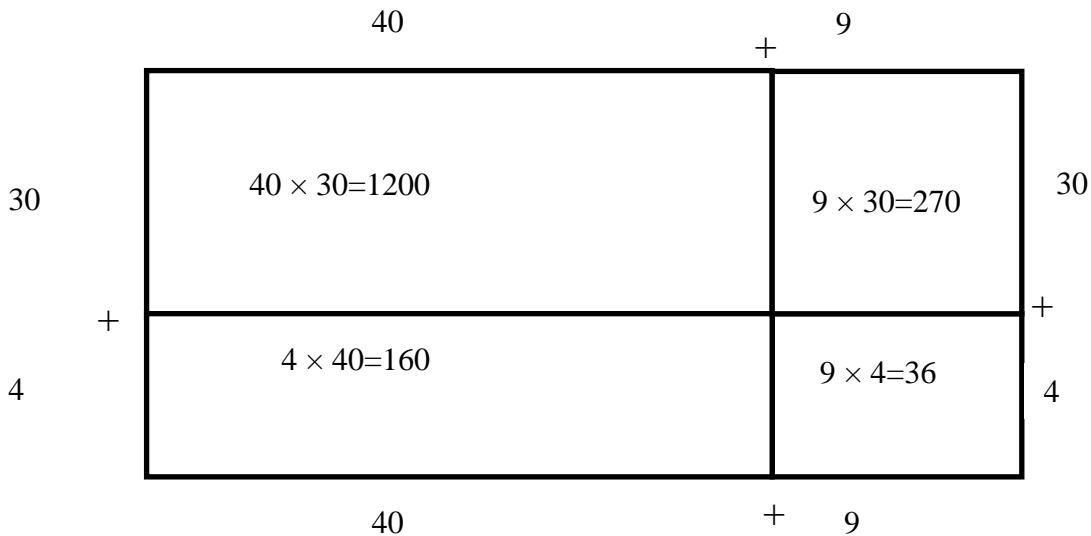
The area of each of the 4 smaller rectangles is found. Then the 4 areas are added to find the total area.

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4. **Apply:** Apply the area model of multiplication method to solve  $49 \times 34$ .



5. **Reason:** What is the largest product you can get when you multiply two 2-digit numbers? Explain your reasoning.

Possible answer: The largest product you can get when you multiply two 2-digit numbers is a 4-digit number. You can add 2 (represents the first 2 digit factor) + 2 (represents the other 2 digit factor) to find the amount or you can multiply the largest 2-digit number 99 by 99 and see that its product is 4 digit.

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## Unit 2, Activity 6, Order of Operations

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Oder of Operations Worksheet

Directions:

Perform the operations for each expression in correct order. Use the chart below to help.

**Parentheses**  
**Multiplication/Division (left to right)**  
**Addition/Subtraction (left to right)**

$8 + 16 \div 8$	$4 - (10 - 7)$	$(4 - 4) \div 3 + 1$
$4 \div 2 \times 5$	$1 \times 8 \div 4$	$60 \div (10 + 10)$



**Unit 2, Activity 6, Order of Operations with Answers**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Oder of Operations Worksheet**

Directions:

Perform the operations for each expression in correct order. Use the chart below to help.

<p>Parentheses Multiplication/Division (left to right) Addition/Subtraction (left to right)</p>
---

$8 + 16 \div 8$ $8 + 2$ $10$	$4 - (10 - 7)$ $4 - 3$ $1$	$(4 - 4) \div 3 + 1$ $0 \div 3 + 1$ $0 + 1$ $1$
$4 \div 2 \times 5$ $2 \times 5$ $10$	$1 \times 8 \div 4$ $8 \div 4$ $2$	$60 \div (10 + 10)$ $60 \div 20$ $3$

**Unit 2, Activity 7, Parentheses, Brackets, and Braces**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Parentheses, Brackets, and Braces**

Directions:

Perform the operations in correct order. Remember to start with the inside grouping symbol.

$$[10 - (5 + 1)] \times 3$$

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$$2 \times [6 \div 3 - (5 - 4)] \div 2$$

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$$3\{5 - [(6 + 4) \div 5]\}$$

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$$9 \div \{4 - [(3 - 1) \div 2]\}$$

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**Unit 2, Activity 7, Parentheses, Brackets, and Braces with Answers**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Parentheses, Brackets, and Braces**

Directions: Perform the operations in correct order. Use the chart below to help.

$$\begin{aligned} & [10 - (5 + 1)] \times 3 \\ & [10 - 6] \times 3 \\ & 4 \times 3 \\ & 12 \end{aligned}$$

$$\begin{aligned} & 2 \times [6 \div 3 - (5 - 4)] \div 2 \\ & 2 \times [6 \div 3 - 1] \div 2 \\ & 2 \times [2 - 1] \div 2 \\ & 2 \times 1 \div 2 \\ & 2 \div 2 \\ & 1 \end{aligned}$$

$$\begin{aligned} & 3\{5 - [(6 + 4) \div 5]\} \\ & 3\{5 - [10 \div 5]\} \\ & 3\{5 - 2\} \\ & 3 \times 3 \\ & 9 \end{aligned}$$

$$\begin{aligned} & 9 \div \{4 - [(3 - 1) \div 2]\} \\ & 9 \div \{4 - [2 \div 2]\} \\ & 9 \div \{4 - 1\} \\ & 9 \div \{3\} \\ & 3 \end{aligned}$$

**Unit 2, Activity 10, Rectangle Sections Method of Division**

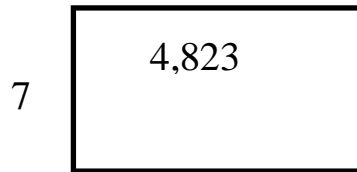
Name: \_\_\_\_\_

Date: \_\_\_\_\_

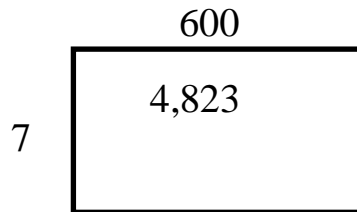
**Process Guide: Rectangle Sections Method of Division Problems**

Use the rectangle sections method of division to answer the following word problem: A passenger train travels the same distance every day. It travels **4,823** miles in a **week**. How far does the train travel each day?

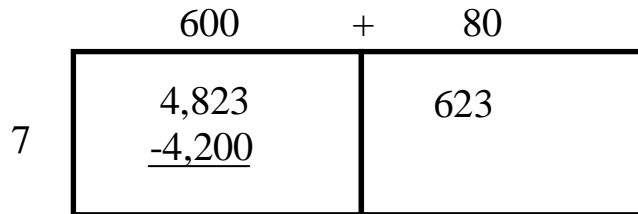
- Explore:** To find out how many miles are traveled in a day, 4,823 will be divided by 7. To discover the answer to this problem, think of  $4,823 \div 7$  as a rectangle with the area known along with the length of one side.



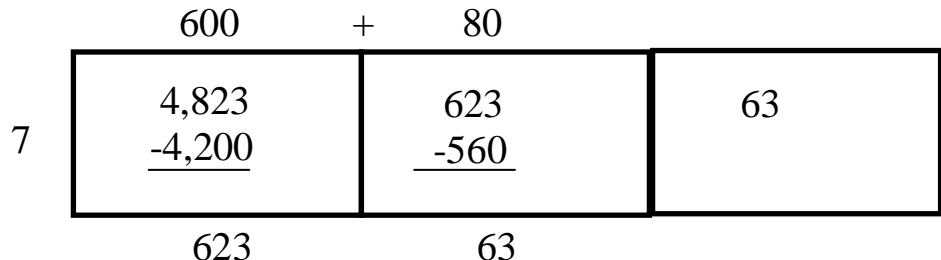
- Step-by-Step:** Figure the length of the unknown side first. Determine how many zeros there will be in the factor for the first section. \_\_\_\_\_  
 $7 \times$  what digit is close to 48 without going over? \_\_\_\_\_



Multiply  $7 \times 600$  and write the result under 4,823. Subtract to see how much is left over. \_\_\_\_\_ Build a new section with an area of 623.

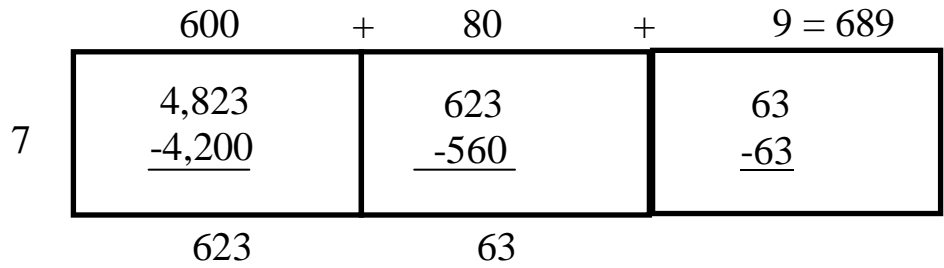


Determine how many zeros there will be in the factor for the section. \_\_\_\_\_  
 $7 \times$  what digit is close to 62 without going over? \_\_\_\_\_ Subtract to see how much is left over. \_\_\_\_\_ Build a new section with an area of 63.



**Unit 2, Activity 10, Rectangle Sections Method of Division**

$7 \times$  what digit is 63? \_\_\_\_\_ Add the three new factors together. \_\_\_\_\_



The total length of the unknown side is 689 units; which is the answer.

**Explain:** Explain how this method helps you see that you are finding an unknown factor when you divide.

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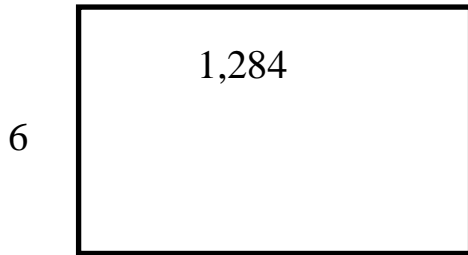


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3. **Apply:** Apply the rectangle sections method of division to divide 1,284 by 6. The process has been started for you.



4. **Compare:** What is similar between this method and the digit-by-digit method you are used to? Will you know what the digit by digit method is?

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**Unit 2, Activity 10, Rectangle Sections Method of Division with Answers**

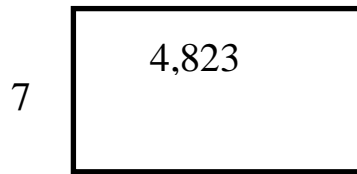
Name: \_\_\_\_\_

Date: \_\_\_\_\_

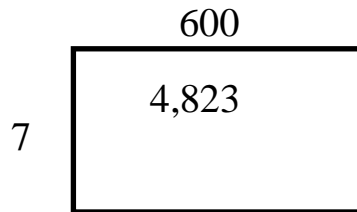
**Process Guide: Rectangle Sections Method of Division Problems**

Use the rectangle sections method of division to answer the following word problem: A passenger train travels the same distance every day. It travels **4,823** miles in a **week**. How far does the train travel each day?

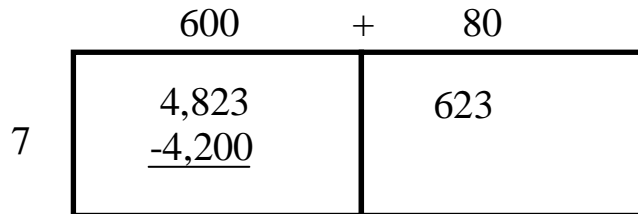
- Explore:** To find out how many miles are traveled in a day, 4,823 will be divided by 7. To discover the answer to this problem, think of  $4,823 \div 7$  as a rectangle with the area known along with the length of one side.



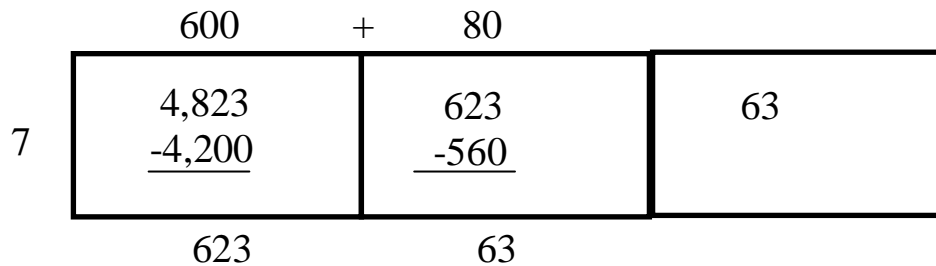
- Step-by-Step:** Figure the length of the unknown side first. Determine how many zeros there will be in the factor for the first section. 2 zeros  
 $7 \times$  what digit is close to 48 without going over? 6



Multiply  $7 \times 600$  and write the result under 4,823. Subtract to see how much is left over. 623  
 Build a new section with an area of 623.



Determine how many zeros there will be in the factor for the section. 1 zero  
 $7 \times$  what digit is close to 62 without going over? 8 Subtract to see how much is left over. 63  
 Build a new section with an area of 63.



**Unit 2, Activity 10, Rectangle Sections Method of Division with Answers**

$7 \times$  what digit is 63? 9 Add the three new factors together. 689

	600	+	80	+	9 = 689
7	$\begin{array}{r} 4,823 \\ -4,200 \\ \hline \end{array}$	$\begin{array}{r} 623 \\ -560 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ -63 \\ \hline \end{array}$		
	623		63		

The total length of the unknown side is 689 units; which is the answer.

**Explain:** Explain how this method helps you see that you are finding an unknown factor when you divide.

Possible answer: This method helps to see that an unknown factor is being found because the model looks like a rectangle with the area and the length of 1 side known.

3. **Apply:** Apply the rectangle sections method of division to divide 1,284 by 6. The process has been started for you.

	200	+	10	+	4 = 214
6	$\begin{array}{r} 1,284 \\ -1,200 \\ \hline 84 \end{array}$	$\begin{array}{r} 84 \\ -60 \\ \hline 24 \end{array}$	$\begin{array}{r} 24 \\ -24 \\ \hline 0 \end{array}$		

4. **Compare:** What is similar between this method and the method you are used to?

Answers may vary. Students may find similarities in dividing each digit by each place value or may notice the dividends in each section are found in order to find the quotient.

**Unit 2, Activity 12, Which Method?**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

4,381	38	2,000
100	99	8,296
200	635	62
19	1	4

Using the numbers in the table, write 2 problems for each method. The problems in part A should use 2 of the numbers and the problems in part B should use 3 of the numbers. You can use any operations in the problems, but make sure that you use addition, subtraction, multiplication, and division at least once in the 6 problems.

1. I would use mental math to work these problems.

A. \_\_\_\_\_

B. \_\_\_\_\_

2. I would use a calculator to work these problems.

A. \_\_\_\_\_

B. \_\_\_\_\_

3. I would use paper and pencil to work these problems.

A. \_\_\_\_\_

B. \_\_\_\_\_



**Unit 2, Activity 15, Decimal Patterns Chart**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Directions:

Calculate the answers to the problems in the chart using a calculator. Multiply each number shown by 0.1. Divide each number by 10.

Remember to look for patterns in the answers. The first row has been done for you.

<b>Number:</b>	<b>To multiply by:</b>	<b>Answer:</b>	<b>Number:</b>	<b>Divide by:</b>	<b>Answer:</b>
10	$\times 0.1$	<b>1</b>	10	$\div 10$	<b>1</b>
9	$\times 0.1$		9	$\div 10$	
8	$\times 0.1$		8	$\div 10$	
7	$\times 0.1$		7	$\div 10$	
6	$\times 0.1$		6	$\div 10$	
5	$\times 0.1$		5	$\div 10$	
4	$\times 0.1$		4	$\div 10$	
3	$\times 0.1$		3	$\div 10$	
2	$\times 0.1$		2	$\div 10$	
1	$\times 0.1$		1	$\div 10$	

Calculate the answers to the problems in the chart using a calculator. Multiply each number shown by 0.01. Divide each number by 100.

Remember to look for patterns in the answers. The first row has been done for you.

<b>Number:</b>	<b>To multiply by:</b>	<b>Answer:</b>	<b>Number:</b>	<b>Divide by:</b>	<b>Answer:</b>
10	$\times 0.01$	<b>0.10</b>	10	$\div 100$	<b>0.10</b>
9	$\times 0.01$		9	$\div 100$	
8	$\times 0.01$		8	$\div 100$	
7	$\times 0.01$		7	$\div 100$	
6	$\times 0.01$		6	$\div 100$	
5	$\times 0.01$		5	$\div 100$	
4	$\times 0.01$		4	$\div 100$	
3	$\times 0.01$		3	$\div 100$	
2	$\times 0.1$		2	$\div 10$	
1	$\times 0.1$		1	$\div 10$	

## Unit 2, Activity 15, Decimal Patterns Chart with Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Directions:

Calculate the answers to the problems in the chart using a calculator. Multiply each number shown by 0.1. Divide each number by 10.

Remember to look for patterns in the answers. The first row has been done for you.

<b>Number:</b>	<b>To multiply by:</b>	<b>Answer:</b>	<b>Number:</b>	<b>Divide by:</b>	<b>Answer:</b>
10	$\times 0.1$	1	10	$\div 10$	1
9	$\times 0.1$	0.9	9	$\div 10$	0.9
8	$\times 0.1$	0.8	8	$\div 10$	0.8
7	$\times 0.1$	0.7	7	$\div 10$	0.7
6	$\times 0.1$	0.6	6	$\div 10$	0.6
5	$\times 0.1$	0.5	5	$\div 10$	0.5
4	$\times 0.1$	0.4	4	$\div 10$	0.4
3	$\times 0.1$	0.3	3	$\div 10$	0.3
2	$\times 0.1$	0.2	2	$\div 10$	0.2
1	$\times 0.1$	0.1	1	$\div 10$	0.1

Calculate the answers to the problems in the chart using a calculator. Multiply each number shown by 0.01. Divide each number by 100.

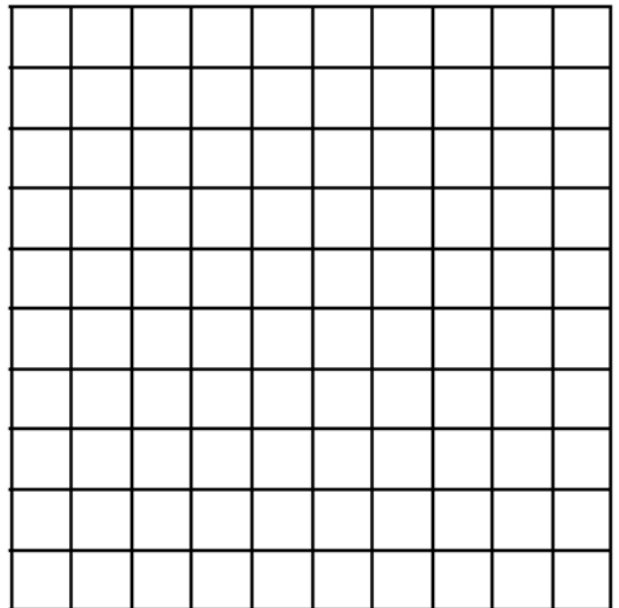
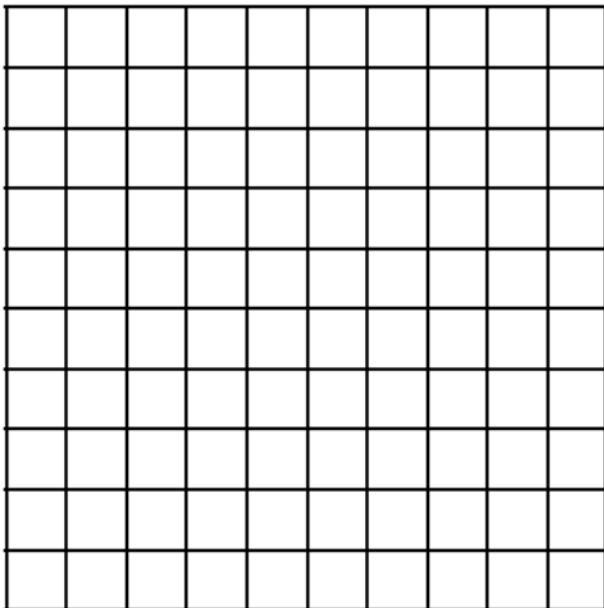
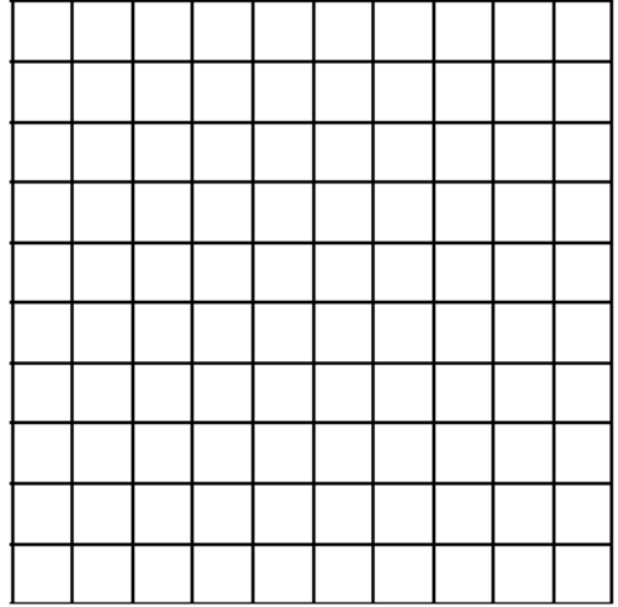
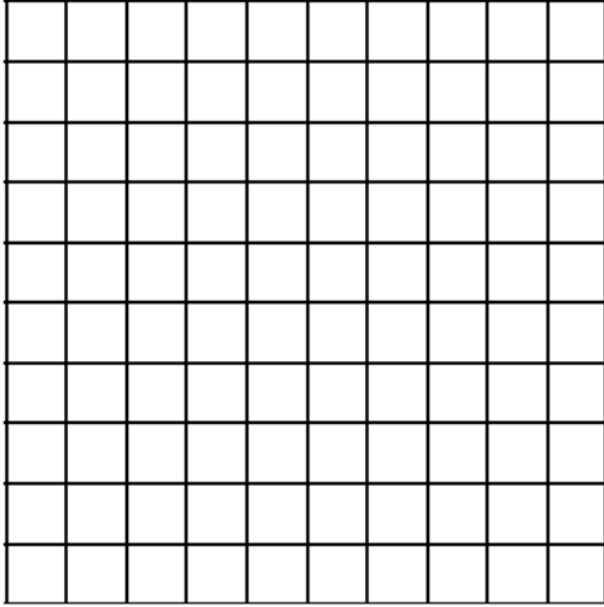
Remember to look for patterns in the answers. The first row has been done for you.

<b>Number:</b>	<b>To multiply by:</b>	<b>Answer:</b>	<b>Number:</b>	<b>Divide by:</b>	<b>Answer:</b>
10	$\times 0.01$	0.10	10	$\div 100$	0.10
9	$\times 0.01$	0.09	9	$\div 100$	0.09
8	$\times 0.01$	0.08	8	$\div 100$	0.08
7	$\times 0.01$	0.07	7	$\div 100$	0.07
6	$\times 0.01$	0.06	6	$\div 100$	0.06
5	$\times 0.01$	0.05	5	$\div 100$	0.05
4	$\times 0.01$	0.04	4	$\div 100$	0.04
3	$\times 0.01$	0.03	3	$\div 100$	0.03
2	$\times 0.01$	0.02	2	$\div 100$	0.02
1	$\times 0.01$	0.01	1	$\div 100$	0.01

*Unit 2, Activities 16, 17, and 18, Hundreds Grid*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



**Unit 2, Activity 17, Moving Methods of Multiplication**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Moving Methods of Multiplication**

Directions: Find the answers to the problems by finding the partial products. Remember to align the decimals as you would whole numbers before multiplying. When you multiply, work the problem without the decimals. After you add the partial products, count the total amount of numbers after the decimal point in the original expression, and move the decimal point that amount of places to the left in the answer.

$4.9 \times 2.4$	$0.9 \times 0.03$	$81 \times 8.2$
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Directions: Find the answers to the problems by using the area model method. Remember to use the expanded form of the decimals to multiply. Add your partial products in the space provided.

**Consider the expression:  $8.5 \times 0.62$**

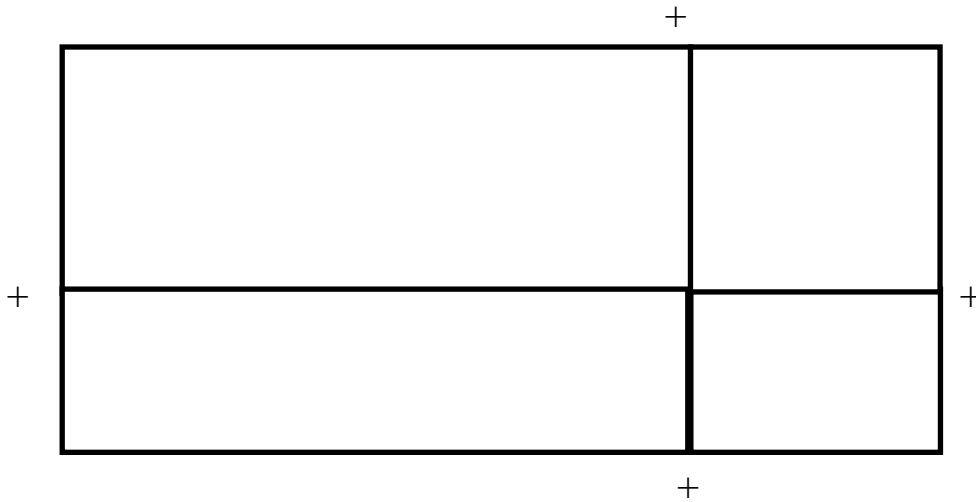

+


+

Add your partial products here:
---------------------------------

*Unit 2, Activity 17, Moving Methods of Multiplication*

6. Consider the expression:  $0.89 \times 0.73$



Add your partial products here:

**Unit 2, Activity 17, Moving Methods of Multiplication with Answers**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Moving Methods of Multiplication**

Directions: Find the answers to the problems by finding the partial products. Remember to align the decimals as you would whole numbers before multiplying. When you multiply, work the problem without the decimals. After you add the partial products, count the total amount of numbers after the decimal point in the original expression, and move the decimal point that amount of places to the left in the answer.

<p><math>4.9 \times 2.4</math></p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;"><math>4.9</math></td> <td></td> <td style="text-align: right;"><math>0.26</math></td> </tr> <tr> <td style="text-align: right;"><math>\times 2.4</math></td> <td></td> <td style="text-align: right;"><math>\times 0.14</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>36</math></td> <td style="padding: 2px;"><math>4 \times 9</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>196</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>160</math></td> <td style="padding: 2px;"><math>4 \times 40</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>980</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>180</math></td> <td style="padding: 2px;"><math>20 \times 9</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>11.76</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>800</math></td> <td style="padding: 2px;"><math>20 \times 40</math></td> <td></td> </tr> </table>	$4.9$		$0.26$	$\times 2.4$		$\times 0.14$	$36$	$4 \times 9$	$196$	$160$	$4 \times 40$	$980$	$180$	$20 \times 9$	$11.76$	$800$	$20 \times 40$		<p><math>0.9 \times 0.03</math></p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;"><math>0.90</math></td> <td></td> <td style="text-align: right;"><math>0.90</math></td> </tr> <tr> <td style="text-align: right;"><math>\times 0.03</math></td> <td></td> <td style="text-align: right;"><math>\times 0.03</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>0</math></td> <td style="padding: 2px;"><math>0 \times 3</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>270</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>270</math></td> <td style="padding: 2px;"><math>3 \times 90</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>0</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>0</math></td> <td style="padding: 2px;"><math>0 \times 0</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>0.0270</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>0</math></td> <td style="padding: 2px;"><math>0 \times 90</math></td> <td></td> </tr> </table>	$0.90$		$0.90$	$\times 0.03$		$\times 0.03$	$0$	$0 \times 3$	$270$	$270$	$3 \times 90$	$0$	$0$	$0 \times 0$	$0.0270$	$0$	$0 \times 90$		<p><math>81 \times 8.2</math></p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;"><math>81</math></td> <td></td> <td style="text-align: right;"><math>81</math></td> </tr> <tr> <td style="text-align: right;"><math>\times 8.2</math></td> <td></td> <td style="text-align: right;"><math>\times 8.2</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>2</math></td> <td style="padding: 2px;"><math>2 \times 1</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>162</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>160</math></td> <td style="padding: 2px;"><math>2 \times 80</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>6480</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>80</math></td> <td style="padding: 2px;"><math>80 \times 1</math></td> <td style="border: 1px dashed black; padding: 2px;"><math>664.2</math></td> </tr> <tr> <td style="border: 1px dashed black; padding: 2px;"><math>6400</math></td> <td style="padding: 2px;"><math>80 \times 80</math></td> <td></td> </tr> </table>	$81$		$81$	$\times 8.2$		$\times 8.2$	$2$	$2 \times 1$	$162$	$160$	$2 \times 80$	$6480$	$80$	$80 \times 1$	$664.2$	$6400$	$80 \times 80$	
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$80$	$80 \times 1$	$664.2$																																																						
$6400$	$80 \times 80$																																																							

Directions: Find the answers to the problems by using the area model method. Remember to use the expanded form of the decimals to multiply. Add your partial products in the space provided.

**Consider the expression:  $8.5 \times 0.62$**

	$8$	$+ 0.5$	
$0.60$	$0.60 \times 8 = 4.8$	$0.60 \times 0.5 = 0.3$	$0.60$
$+$	$0.02 \times 8 =$	$0.02 \times 0.5 = 0.01$	$+$
$0.02$			$0.02$
	$8$	$+ 0.5$	

Add your partial products here:

$4.80$
$0.30$
$0.16$
$+0.01$
$5.27$

*Unit 2, Activity 17, Moving Methods of Multiplication with Answers*

Consider the expression:  $0.89 \times 0.73$

$$0.80 \quad + \quad 0.09$$

$0.70$	$0.80 \times 0.70 = 0.56$	$0.70 \times 0.09 =$ $0.063$	$0.70$
+	$0.03 \times 0.80 = 0.024$	$0.03 \times 0.09 =$ $0.0027$	+
$0.03$			$0.03$

Add your partial products here:

$$\begin{array}{r}
 0.5600 \\
 0.0240 \\
 0.0630 \\
 +0.0027 \\
 \hline
 0.6497
 \end{array}$$

*Unit 3, Activity 1, Graphing Vocabulary*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Word	+	√	-	Example	Definition
axis					
scale					
mean					
median					
mode					
range					
cluster					
gap					

Mark your understanding of each word. A “+” means understands well, a “√” means some understanding, and a “-” means do not know.

If your understanding changes as the class completes the graphing activities, mark another column. You might begin this unit with a “-” for the word gap, change to a “√” in the middle of the unit, and finally mark a “+” by the end of the activities. The goal is to have all plusses by the end of the unit.

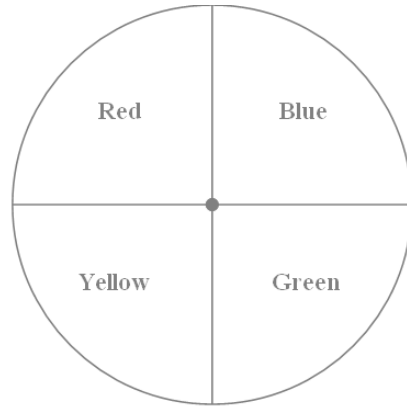


**Unit 3, Activity 2, Spinning Bar Graph Anticipation Guide**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Spinning Bar Graph Anticipation Guide Statements**



**Spinner A**

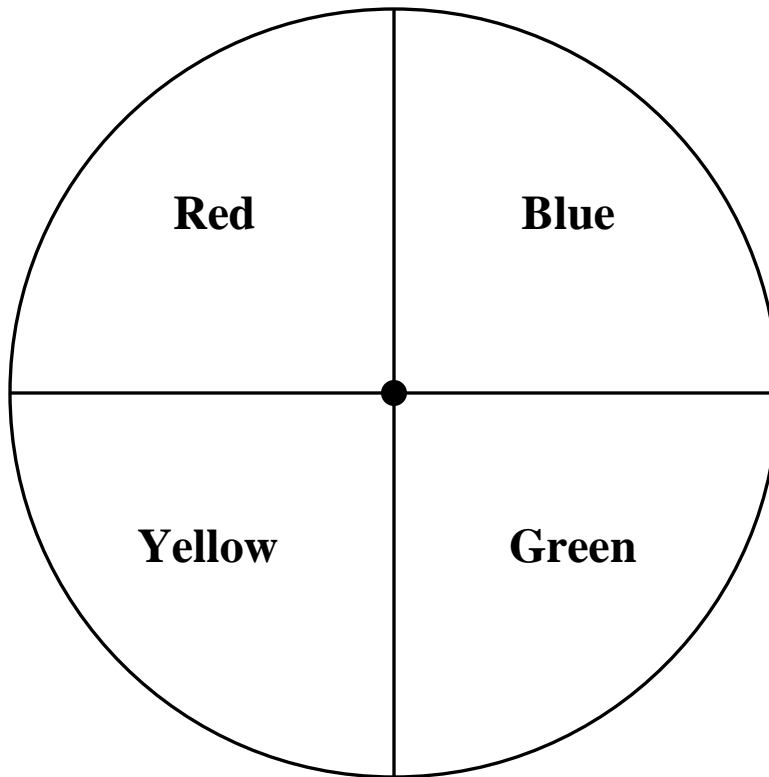
1. Look at Spinner A. Suppose you spin Spinner A 20 times. Red has the best chance of being spun.  
True \_\_\_\_\_ False \_\_\_\_\_
2. Green has a better chance of being spun over any other color.  
True \_\_\_\_\_ False \_\_\_\_\_
3. If the spinner is spun clockwise, blue has a better chance of being spun because it is the first color.  
True \_\_\_\_\_ False \_\_\_\_\_
4. Since red and green are diagonal to each other, they have an equal chance of being spun.  
True \_\_\_\_\_ False \_\_\_\_\_
5. Yellow is least likely to be spun.  
True \_\_\_\_\_ False \_\_\_\_\_
6. Each color is equally represented on the spinner.  
Yes \_\_\_\_\_ No \_\_\_\_\_
7. Each color has an equal chance of being spun.  
True \_\_\_\_\_ False \_\_\_\_\_

*Unit 3, Activity 2, Spinners*

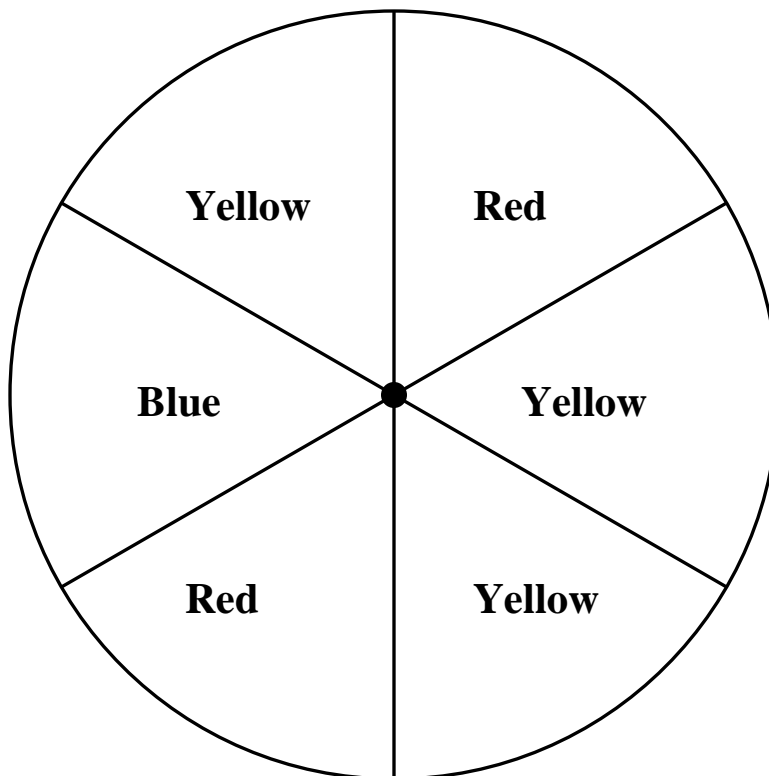
Name: \_\_\_\_\_

Date: \_\_\_\_\_

Spinner A



Spinner B



*Unit 3, Activities 2, 3, and 5, Bar Graph*

Name: \_\_\_\_\_

Date: \_\_\_\_\_


*Unit 3, Activity 8, Types of Graphs*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Features of the Graph/Plot**

<b>Types of Graphs/Plots</b>						

**Directions:**

On this word grid the first column has “Types of graphs” listed as the column heading. List the types of graphs studied so far.

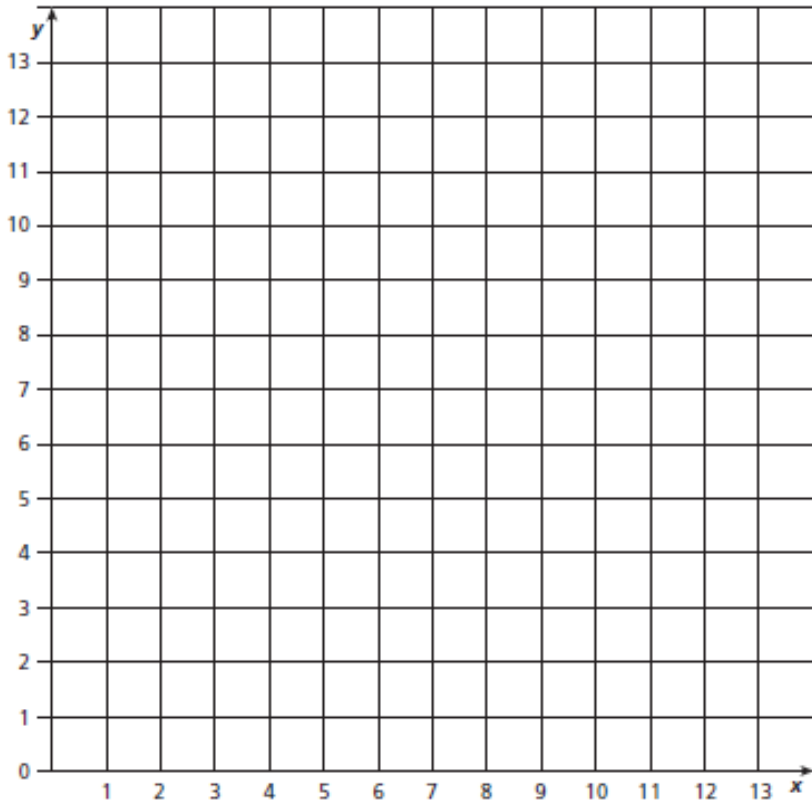
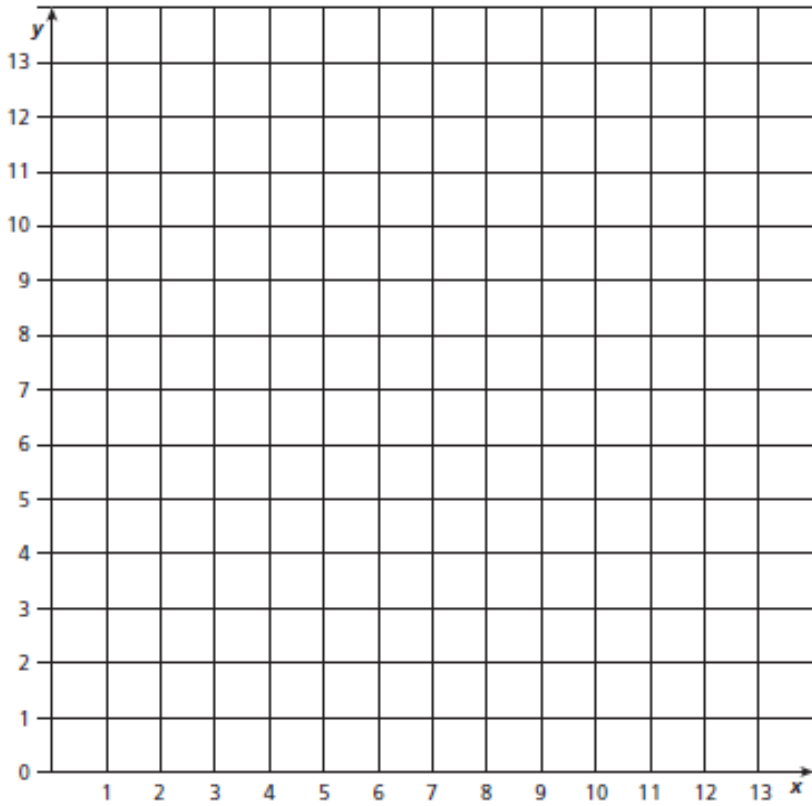
List features of the graph in the other columns. This may include “shows trends” “use bars,” or other features.

In each box next to the type of graph, write A for always if the graph always has this feature, S for sometimes if the graph sometimes has this feature, or N for never if the graph never has this feature. Once completed, share your word grid with others and look for differences and similarities among graphs.

*Unit 3, Activity 10, Coordinate Grid*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



*Unit 3, Activity 10, Split-Page Notetaking*

Title _____	Name _____

*Unit 3, Activity 10, Split-Page Notetaking with Answers*

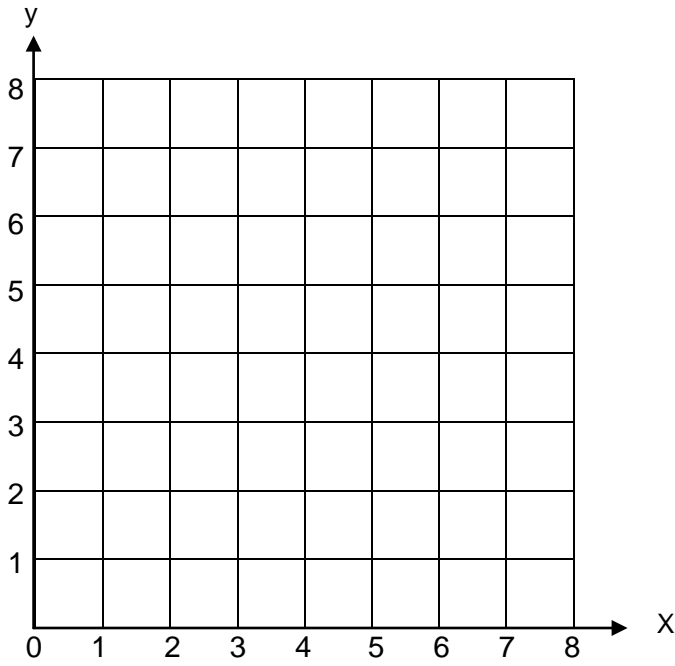
<u>Title</u> <u>Coordinate Graphs in the First Quadrant</u> <u>Name</u> <u>Joe Student</u>	
<u>Possible Answers</u>	
axis	<i>looks like a number line x-axis is a horizontal line y-axis is a vertical line where the x-axis and y-axis intersect is called the origin</i>
ordered pairs	<i>pair of numbers that shows the position of a point on a coordinate grid</i>
coordinates	<i>the numbers in an ordered pair x-coordinate is the first number y-coordinate is the second number</i>

*Unit 3, Activity 11, Plotting Pairs*

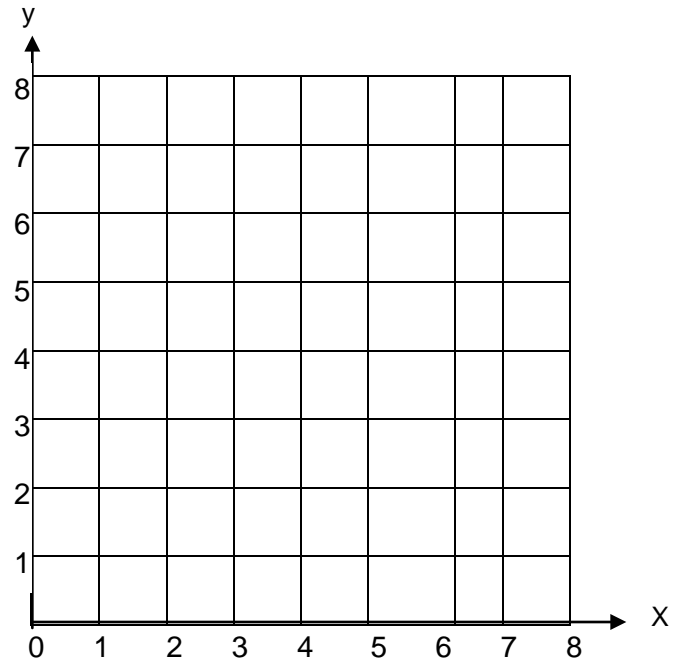
Name: \_\_\_\_\_

Date: \_\_\_\_\_

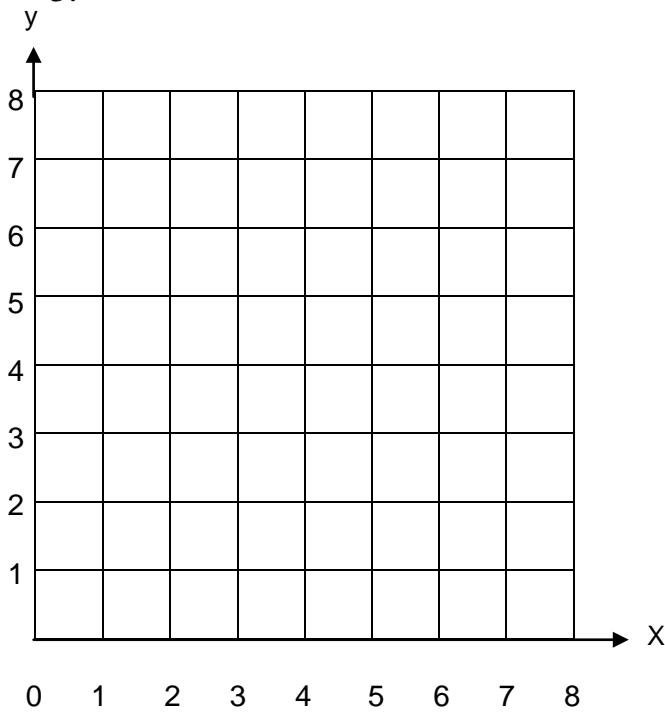
1.



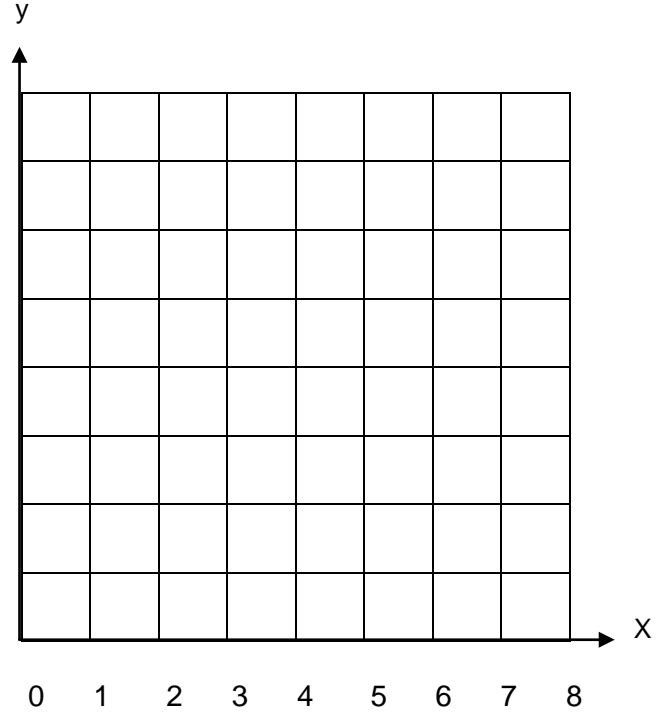
2.



3.



4.





**Unit 4, Activity 2, What about Fractions?**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Word/Phrase</b>	<b>+</b>	<b>√</b>	<b>-</b>	<b>Example</b>	<b>Definition</b>
numerator					
denominator					
mixed number					
improper fraction					
equivalent fractions					
simplest form					

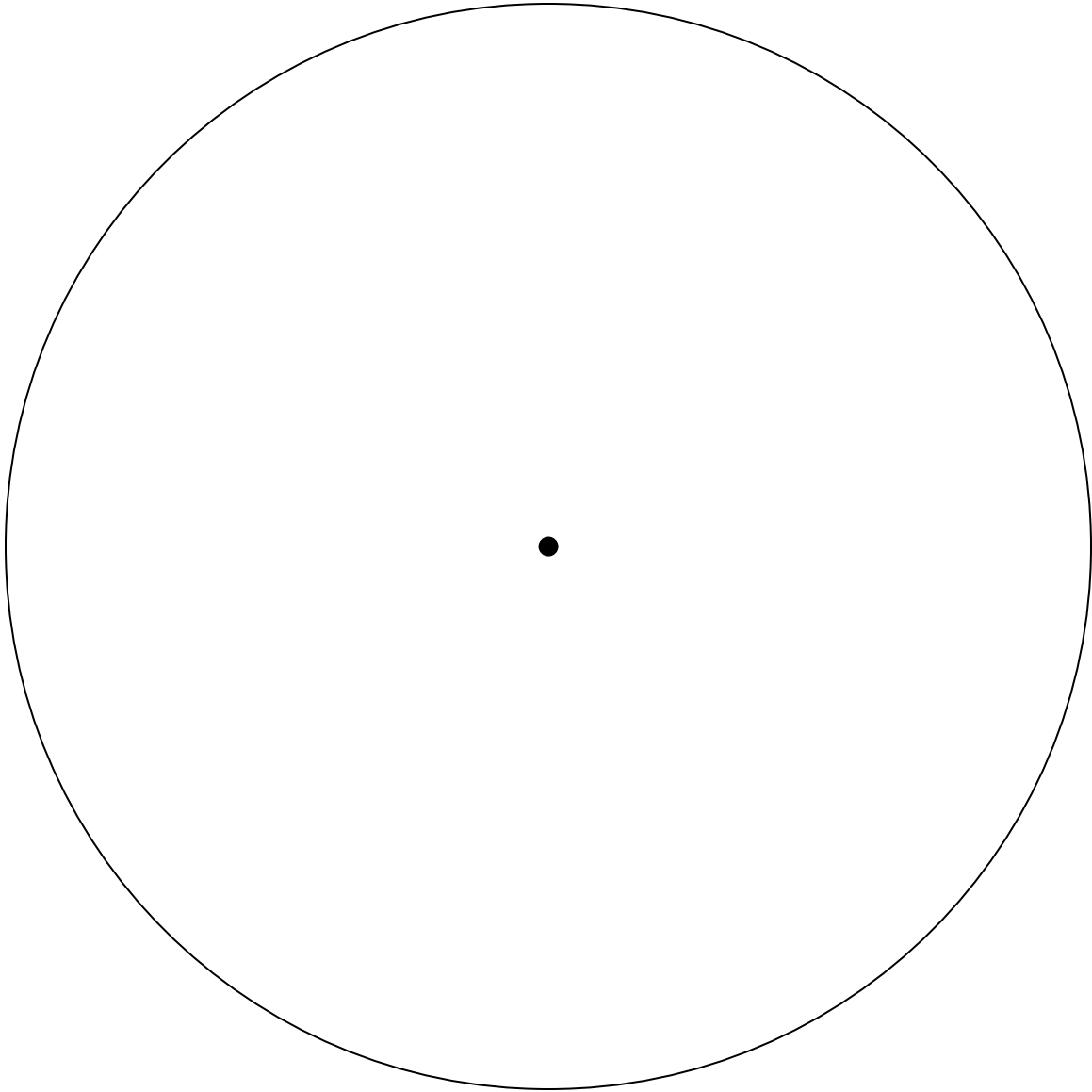
**Mark your understanding of each word. A “+” means understands well, a “√” means some understanding, and a “-” means do not know.**

**If your understanding changes as the class completes the fraction activities, mark another column. You might begin this unit with a “-” for the phrase simplest form, mark a “√” in the middle of the unit, and then mark a “+” by the end of the activities. The goal is to have all plusses by the end of the unit.**

*Unit 4, Activity 3, Circle*

Name: \_\_\_\_\_

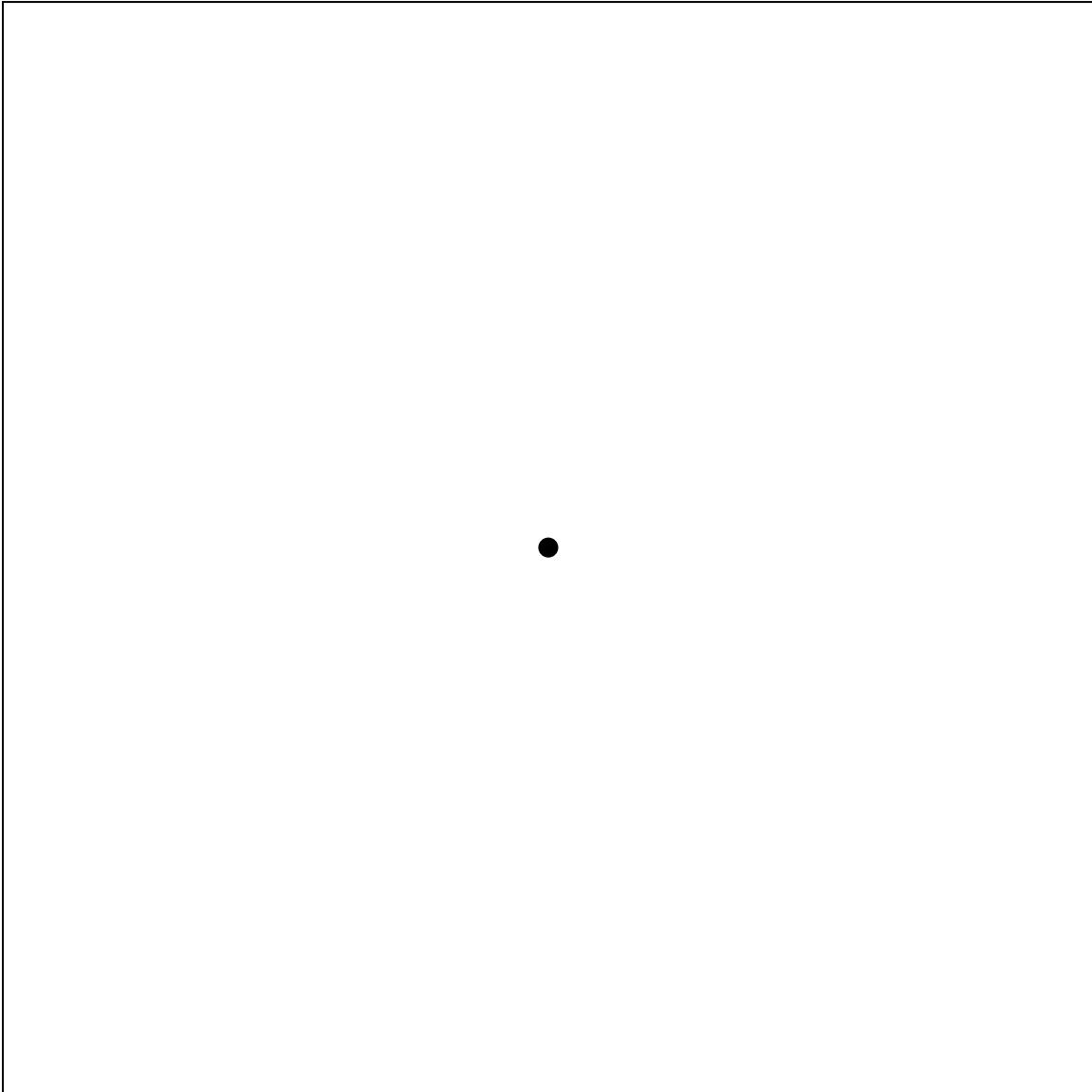
Date: \_\_\_\_\_



*Unit 4, Activity 3, Square*

Name: \_\_\_\_\_

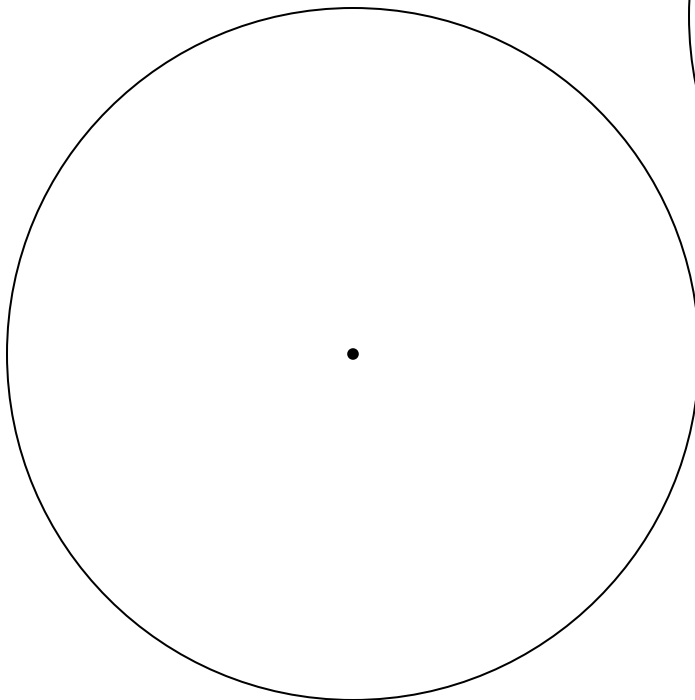
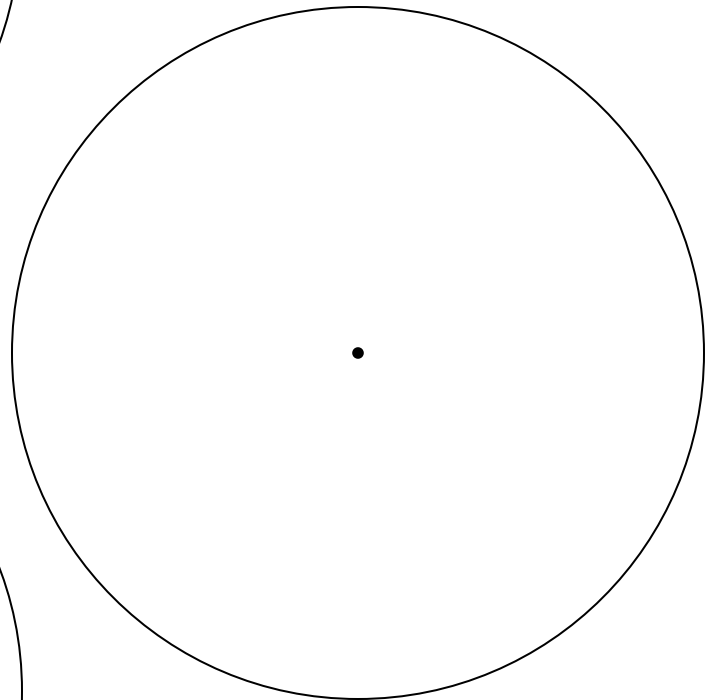
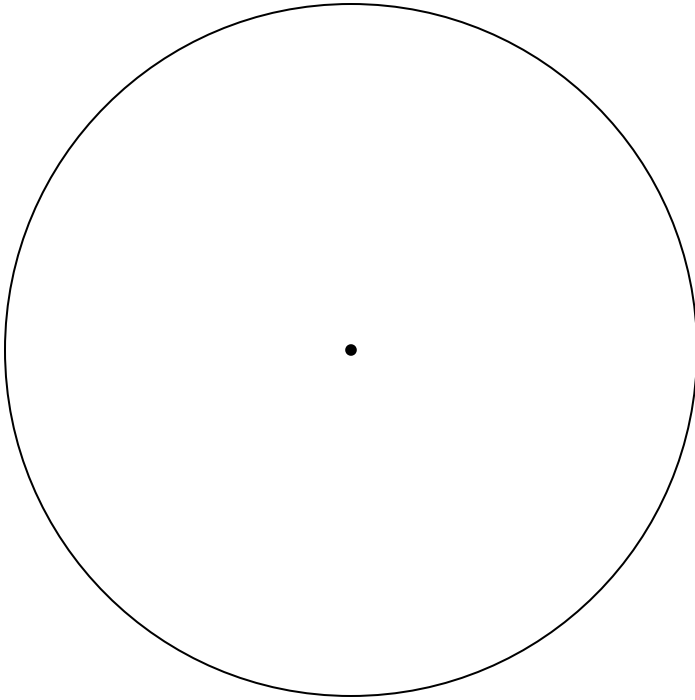
Date: \_\_\_\_\_



*Unit 4, Activity 4, Equivalent Fractions*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



**Unit 4, Activity 8, Sample Recipes**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Lemonade**

- 1 cup sugar
- 6 cups cold water
- 2 cups lemon juice

**Hot Chocolate**

- 2 one-ounce squares of sweetened chocolate
- 1 cup of water
- 4 cups of milk

**Burgers**

- 1 pound of ground beef
- 2 tablespoons of green pepper
- 6 tablespoons of onions
- 3 tablespoons of catsup
- 1 teaspoon of salt
- 2 teaspoons of prepared mustard

**Grilled Cheese Sandwiches**

- 2 slices of bread
- 1 slice of cheese
- 4 pats of butter

**Caramel Snappers**

- 144 pecan halves
- 36 caramels
- 1 cup of semisweet chocolate

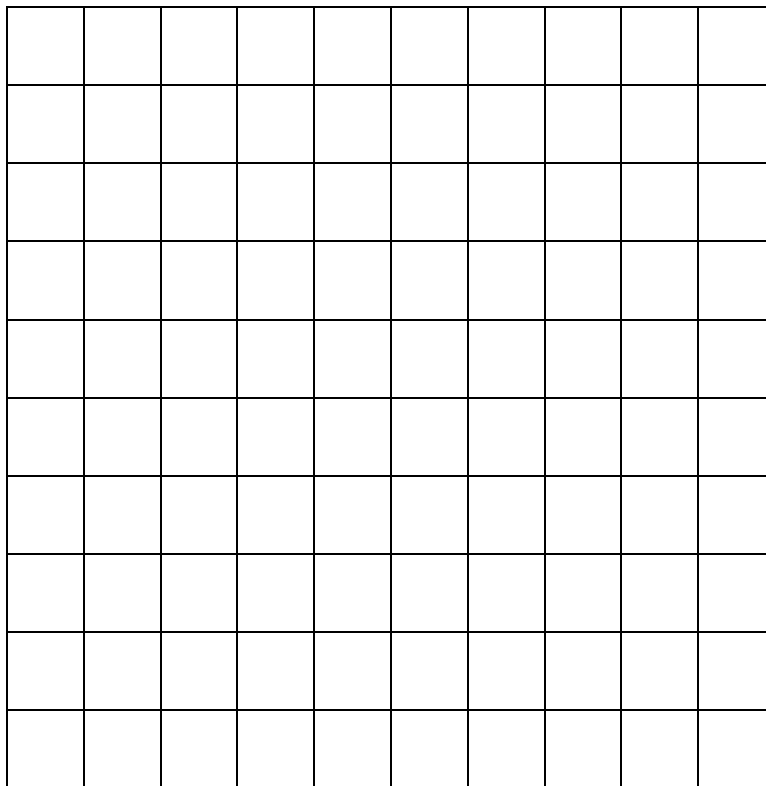
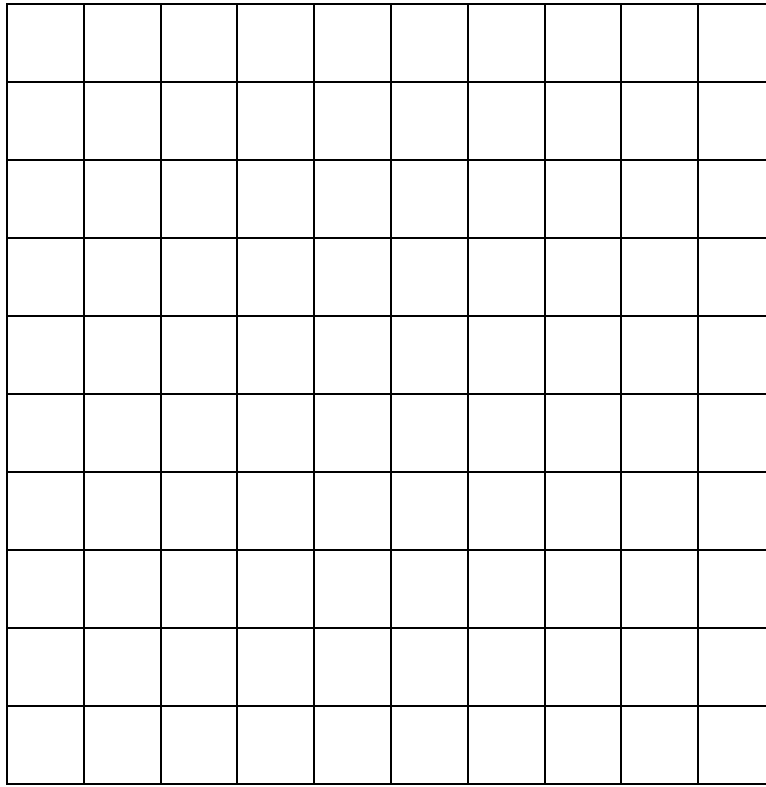
**Easy Macaroons**

- 16 ounces of shredded coconut
- 15 ounces of sweetened condensed milk
- 2 teaspoons of vanilla

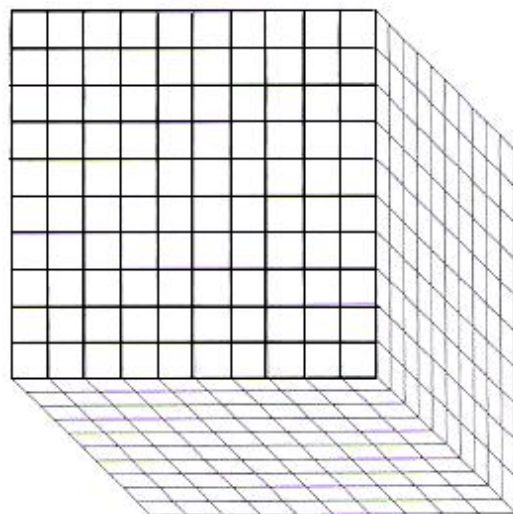
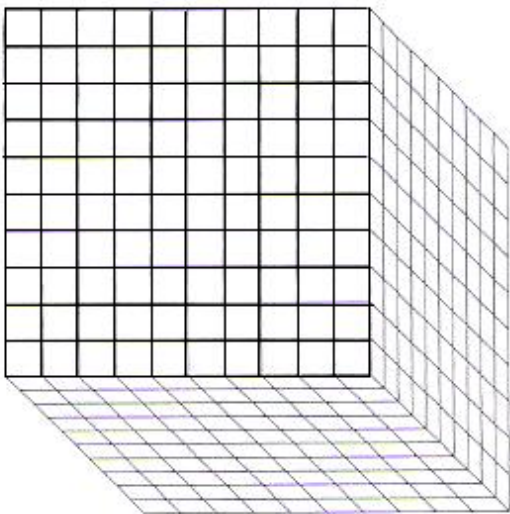
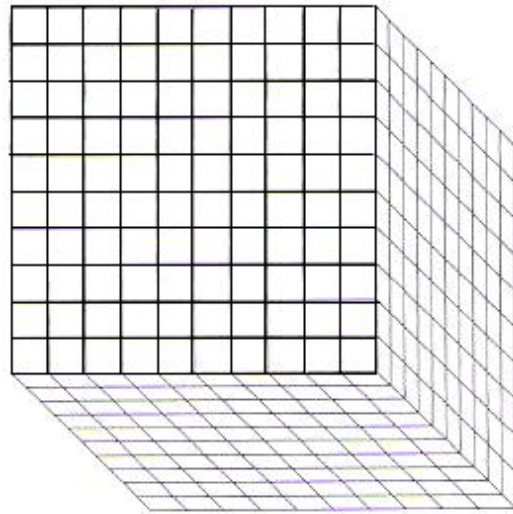
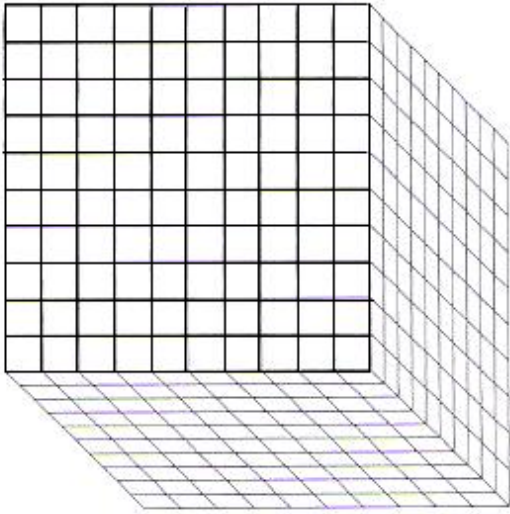
*Unit 4, Activity 11, Decimal Squares*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



*Unit 4, Activity 11, Thousand Cubes*



*Unit 4, Activity 12, Place Value Chart with Decimals*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Ones</b>			<b>•</b>	<b>Decimals</b>		
hundreds	tens	ones	•	tenths	hundredths	thousandths



*Unit 4, Activity 13, Cuisenaire Rods*

W									
Red									
Lt. Green									
Purple									
Yellow									
Dark Green									
Black									
Brown									
Blue									
Orange									

**Unit 4, Activity 13, Cuisenaire Rods Process Guide**

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

**Process Guide: Exploring Fractions with Cuisenaire Rods**

1. **Explore:** Arrange the rods in order of length. What do you notice about the “staircase” created?

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2. **Examine:** Complete the following questions. Answer the “How do you know?” section in complete sentences.

- a. Begin with the orange rod. Which rod is  $\frac{1}{2}$  of the orange rod? \_\_\_\_\_  
How do you know?

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- b. Which rod is  $\frac{1}{5}$  of the orange rod? \_\_\_\_\_  
How do you know?

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- c. Which rod is  $\frac{1}{10}$  of the orange rod? \_\_\_\_\_  
How do you know?

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- d. Now use the brown rod. Which rod is  $\frac{1}{2}$  of the brown rod? \_\_\_\_\_  
How do you know?

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- e. Which rod is  $\frac{1}{4}$  of the brown rod? \_\_\_\_\_  
How do you know?

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**Unit 4, Activity 13, Cuisenaire Rods Process Guide**

- f. Which rod is  $\frac{1}{8}$  of the brown rod? \_\_\_\_\_  
How do you know?

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3. **Reason and Compare:** Complete the following questions. Answer the “How do you know?” section in complete sentences.

- a. Use the light green rod. If the light green rod is  $\frac{1}{3}$ , which rod is the whole?

\_\_\_\_\_

How do you know?

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- b. If the light green rod is  $\frac{1}{3}$ , which rod is  $\frac{2}{3}$ ? \_\_\_\_\_  
How do you know?

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- c. Use the white rod. If the white rod is  $\frac{1}{5}$ , which rod is the whole? \_\_\_\_\_  
How do you know?

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- d. If the white rod is  $\frac{1}{5}$ , which rod is  $\frac{2}{5}$ ? \_\_\_\_\_  
How do you know?

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- e. Use the dark green rod. If the dark green rod is  $\frac{3}{4}$ , which rod is the whole?

\_\_\_\_\_

How do you know?

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- f. If the dark green rod is  $\frac{2}{3}$ , which rod is the whole? \_\_\_\_\_  
How do you know?

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## Unit 4, Activity 13, Cuisenaire Rods Process Guide with Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Process Guide: Exploring Fractions with Cuisenaire Rods** (These answers are sample answers using the white rod as the basis for equivalency)

1. **Explore:** Arrange the rods in order of length. What do you notice about the “staircase” created?

*When the rods are arranged in order of length each rod differs from the next by 1 white rod. (1 centimeter)*

---

---

2. **Examine:** Complete the following questions. Answer the “How do you know?” section in complete sentences.

- a. Begin with the orange rod. Which rod is  $\frac{1}{2}$  of the orange rod? Yellow  
How do you know?

*The orange rod is equal to 10 white rods. The yellow is equal to 5 white rods. 5 is  $\frac{1}{2}$  of 10. Therefore, the yellow rod is  $\frac{1}{2}$  of the orange rod.*

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- b. Which rod is  $\frac{1}{5}$  of the orange rod? Red  
How do you know?

*The orange rod is equal to 10 white rods. The red rod is equal to 2 white rods. 2 is  $\frac{1}{5}$  of 10. Therefore, the red rod is  $\frac{1}{5}$  of the orange rod.*

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- c. Which rod is  $\frac{1}{10}$  of the orange rod? White  
How do you know?

*Ten white rods are equal to 1 orange rod. Therefore, the white rod is  $\frac{1}{10}$  of the orange rod.*

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- d. Now use the brown rod. Which rod is  $\frac{1}{2}$  of the brown rod? purple/pink  
How do you know?

*8 white rods equal 1 brown rod. 4 white rods equal 1 purple/pink rod. 4 is  $\frac{1}{2}$  of 8; therefore, the purple/pink rod is  $\frac{1}{2}$  of the brown rod.*

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- e. Which rod is  $\frac{1}{4}$  of the brown rod? Red  
How do you know?

*1 brown rod is equal to 8 white rods. 1 red rod is equal to 2 white rods. 2 is  $\frac{1}{4}$  of 8. Therefore, the red rod is  $\frac{1}{4}$  of the brown rod.*

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- f. Which rod is  $\frac{1}{8}$  of the brown rod? White  
How do you know?

*Eight white rods are equal to 1 brown rod. Therefore, 1 white rod is  $\frac{1}{8}$  of the brown rod.*

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**Unit 4, Activity 13, Cuisenaire Rods Process Guide with Answers**

3. **Reason and Compare:** Complete the following questions. Answer the “How do you know?” section in complete sentences.
- a. Use the light green rod. If the light green rod is  $\frac{1}{3}$  of the whole, which rod is the whole? Blue  
How do you know?  
3 light green rods equal 1 blue rod.
- 
- 
- b. If the light green rod is  $\frac{1}{3}$  of the whole, which rod is  $\frac{2}{3}$ ? Dark green  
How do you know?  
9 white rods would be the whole. 3 white rods are equal to 1 light green rod. 2 light green rods are equal to 1 dark green rod. 1 dark green rod is equal to 6 white rods. 6 is  $\frac{2}{3}$  of 9; therefore 1 dark green rod is equal to  $\frac{2}{3}$ .
- 
- 
- c. Use the white rod. If the white rod is  $\frac{1}{5}$  of the whole, which rod is the whole?  
Yellow  
How do you know?  
5 white rods are equal to 1 yellow rod.
- 
- 
- d. If the white rod is  $\frac{1}{5}$  of the whole, which rod is  $\frac{2}{5}$ ? Red  
How do you know?  
5 white rods would be the whole. 1 red rod is equal to 2 white rods. 1 red rod is also equal to  $\frac{2}{5}$ .
- 
- 
- e. Use the dark green rod. If the dark green rod is  $\frac{3}{4}$  of the whole, which rod is the whole? Brown  
How do you know?  
1 dark green rod is equal to 6 white rods. 6 is  $\frac{3}{4}$  of 8. 8 white rods are equal to 1 brown rod.
- 
- 
- f. If the dark green rod is  $\frac{2}{3}$ , which rod is the whole? Blue  
How do you know?  
1 dark green rod is equal to 6 white rods. 6 is  $\frac{2}{3}$  of 9. 1 blue rod is equal to 9.
- 
-

**Unit 4, Activity 16, How Big is the Fraction?**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

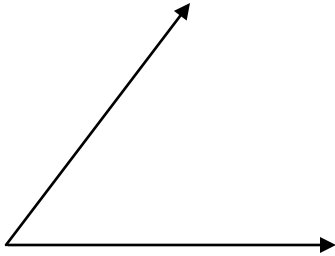
= 0	Between 0 and $\frac{1}{2}$	$= \frac{1}{2}$	Between $\frac{1}{2}$ and 1	= 1	Between 1 and 2

*Unit 5, Activities 3 and 4, Measuring Angles*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

A.



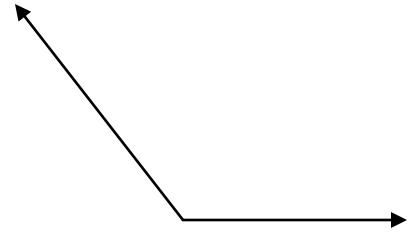
acute

B.



right

C.



obtuse

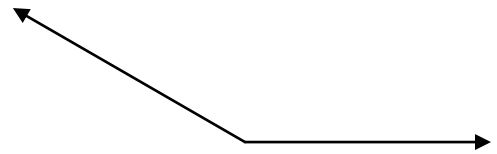
Use your protractor to measure the following angles. Tell what type of angle each one is.

1.



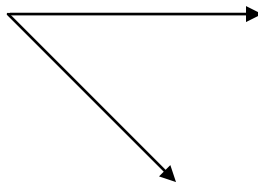
Ans. \_\_\_\_\_

2.



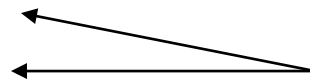
Ans. \_\_\_\_\_

3.



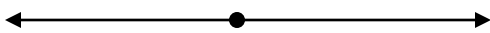
Ans. \_\_\_\_\_

4.



Ans. \_\_\_\_\_

5.



Ans. \_\_\_\_\_

6.



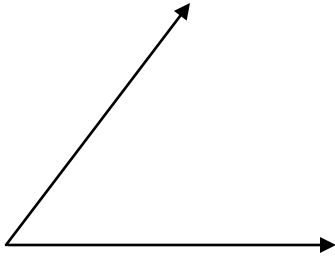
Ans. \_\_\_\_\_

*Unit 5, Activities 3 and 4, Measuring Angles with Answers*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

A.



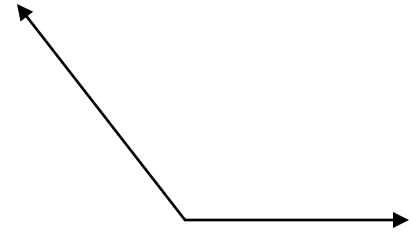
acute  
53°

B.



right  
90°

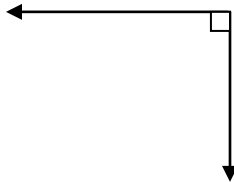
C.



obtuse  
128°

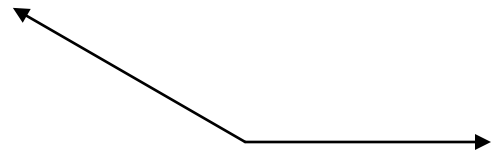
Use your protractor to measure the following angles. Tell what type of angle each one is.

1.



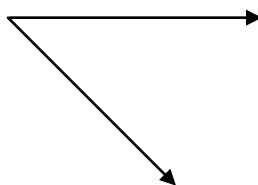
Ans. 90°, right angle

2.



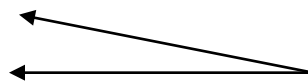
Ans. 150°, obtuse angle

3.



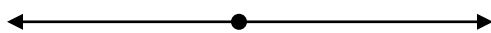
Ans. 46°, acute angle

4.



Ans. 11°, acute angle

5.



Ans. 180°, straight angle

6.



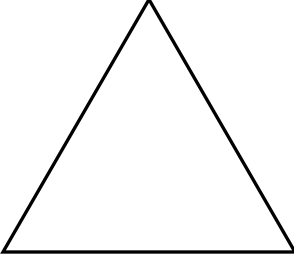
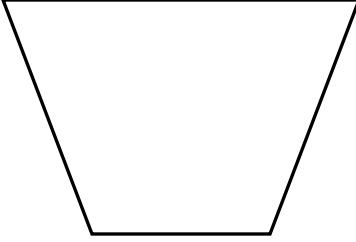
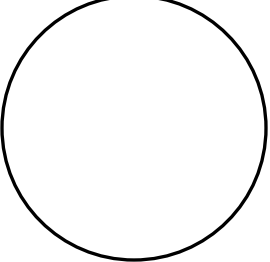

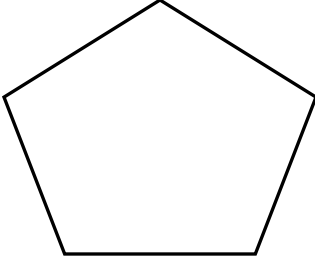
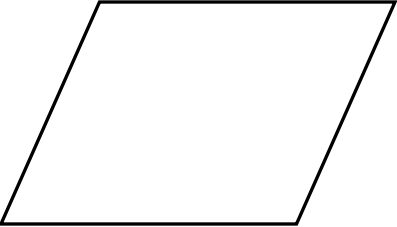
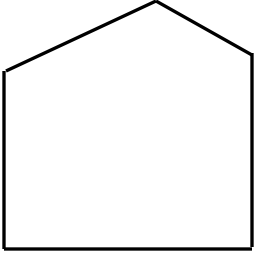
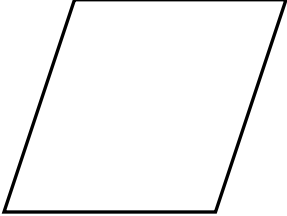
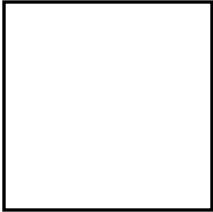
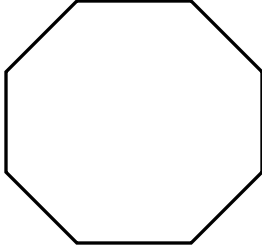
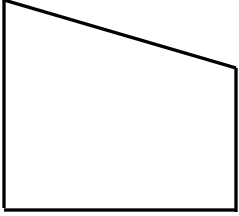
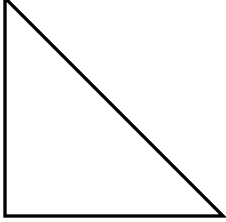
Ans. 135°, obtuse angle



*Unit 5, Activities 6 and 7, Common Shapes*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

A. 	B. 	C. 
D. 	E. 	F. 
G. 	H. 	I. 
J. 	K. 	L. 

**Unit 5, Activity 7, Polygons Anticipation Guide**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Polygons Anticipation Guide Statements**

1. All shapes can be classified as polygons.  
Yes \_\_\_\_\_ No \_\_\_\_\_
2. Straight sides classify a shape as a polygon.  
True \_\_\_\_\_ False \_\_\_\_\_
3. A quadrilateral is a polygon.  
True \_\_\_\_\_ False \_\_\_\_\_
4. All sides of a quadrilateral must be parallel in order for the shape to be classified as a quadrilateral.  
True \_\_\_\_\_ False \_\_\_\_\_
5. A trapezoid is a quadrilateral.  
True \_\_\_\_\_ False \_\_\_\_\_
6. A trapezoid has only one set of parallel sides.  
Yes \_\_\_\_\_ No \_\_\_\_\_
7. A quadrilateral always has only one set of parallel sides.  
Yes \_\_\_\_\_ No \_\_\_\_\_
8. Triangles can be trapezoids.  
Yes \_\_\_\_\_ No \_\_\_\_\_
9. The sides of a triangle will always meet.  
Yes \_\_\_\_\_ No \_\_\_\_\_
10. A quadrilateral is always a parallelogram.  
Yes \_\_\_\_\_ No \_\_\_\_\_
11. A rectangle is both a quadrilateral and a parallelogram.  
Yes \_\_\_\_\_ No \_\_\_\_\_
12. A square is a rectangle.  
Yes \_\_\_\_\_ No \_\_\_\_\_
13. A square has many names that help classify its shape.  
True \_\_\_\_\_ False \_\_\_\_\_

**Unit 5, Activity 7, Polygons Anticipation Guide with Answers**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Polygons Anticipation Guide Statements**

14. All shapes can be classified as polygons.

Yes \_\_\_\_\_ No X

15. Straight sides classify a shape as a polygon.

True X False \_\_\_\_\_

16. A quadrilateral is a polygon.

True X False \_\_\_\_\_

17. All sides of a quadrilateral must be parallel in order for the shape to be classified as a quadrilateral.

True \_\_\_\_\_ False X

18. A trapezoid is a quadrilateral.

True X False \_\_\_\_\_

19. A trapezoid has only one set of parallel sides.

Yes X No \_\_\_\_\_

20. A quadrilateral always has only one set of parallel sides.

Yes \_\_\_\_\_ No X

21. Triangles can be trapezoids.

Yes \_\_\_\_\_ No X

22. The sides of a triangle will always meet.

Yes X No \_\_\_\_\_

23. A quadrilateral is always a parallelogram.

Yes \_\_\_\_\_ No X

24. A rectangle is both a quadrilateral and a parallelogram.

Yes X No \_\_\_\_\_

25. A square is a rectangle.

Yes X No \_\_\_\_\_

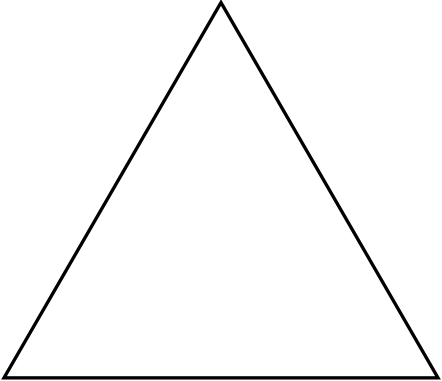
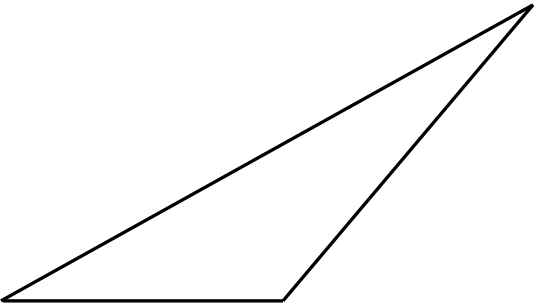
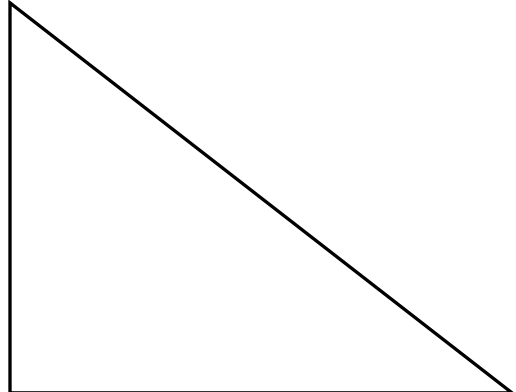
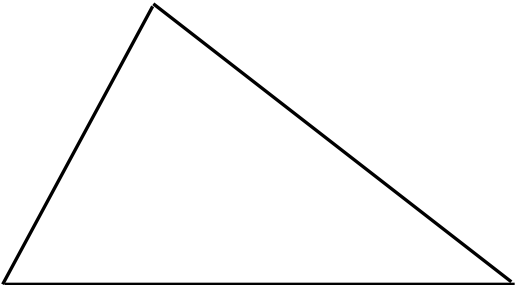
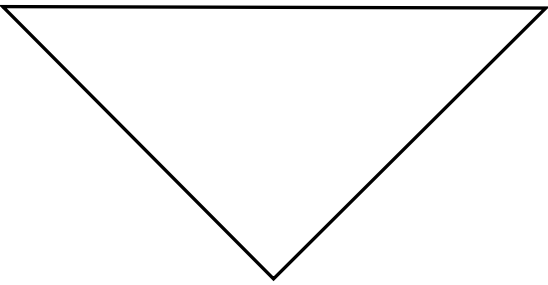
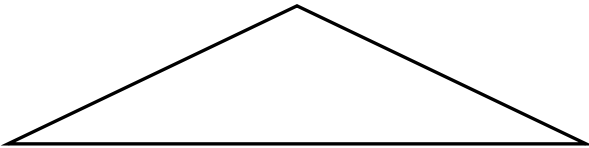
26. A square has many names that help classify its shape.

True X False \_\_\_\_\_

**Unit 5, Activity 8, What Kind of Triangle?**

Name: \_\_\_\_\_

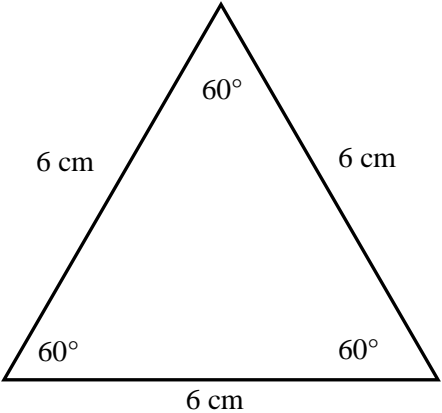
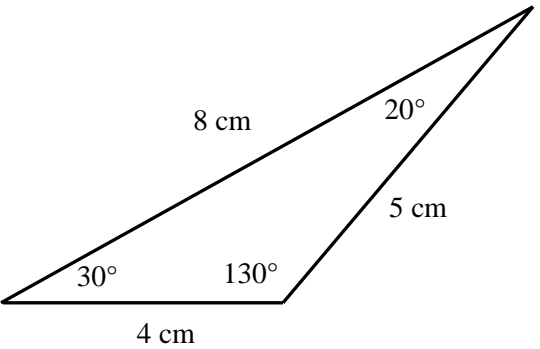
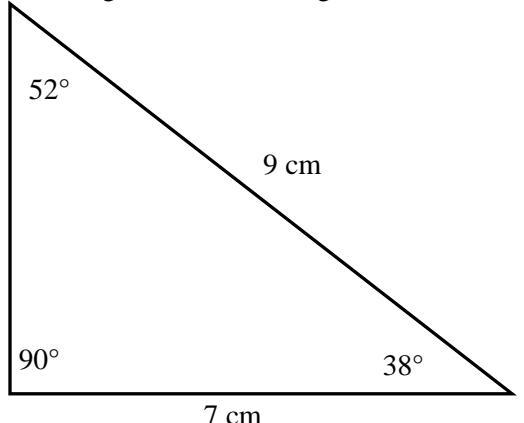
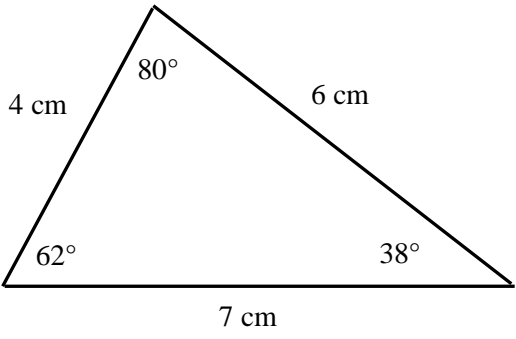
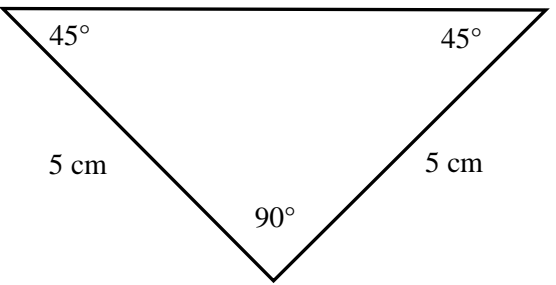
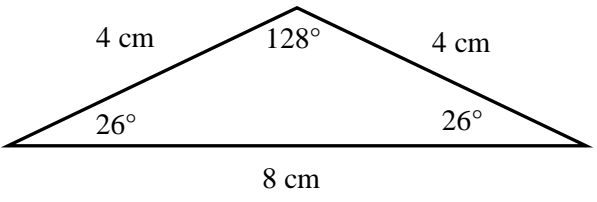
Date: \_\_\_\_\_

<p>A.</p> 	<p>B.</p> 
<p>C.</p> 	<p>D.</p> 
<p>E.</p> 	<p>F.</p> 

**Unit 5, Activity 8, What Kind of Triangle? with Answers**

Name: \_\_\_\_\_

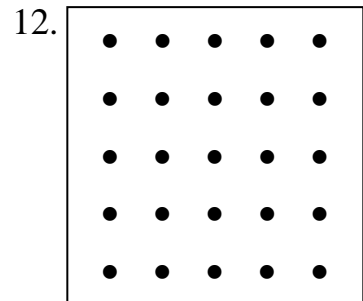
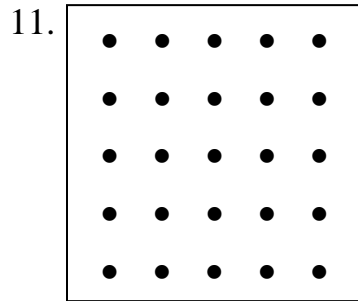
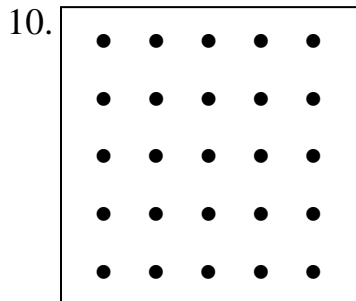
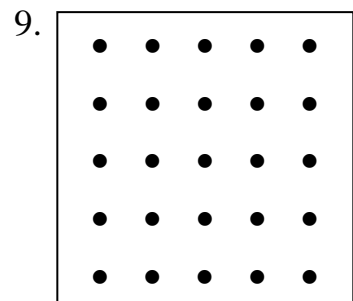
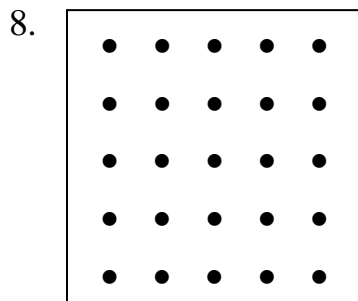
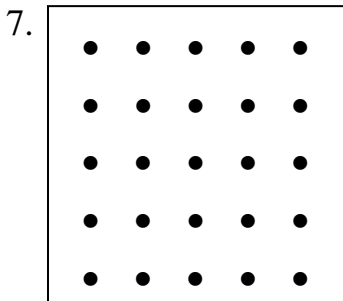
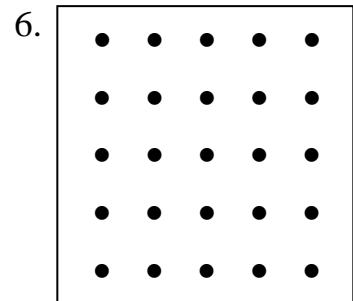
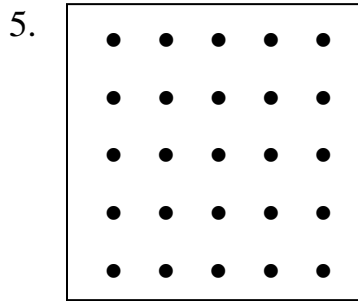
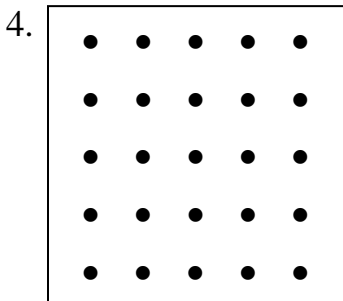
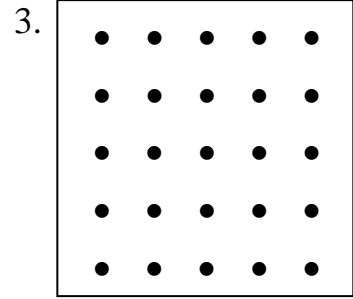
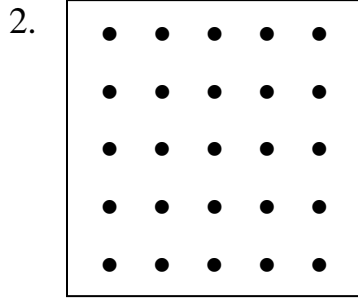
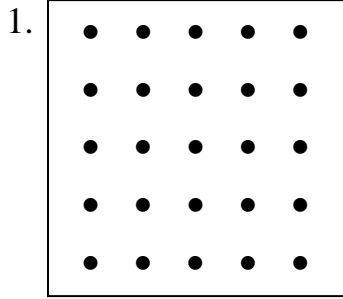
Date: \_\_\_\_\_

<p>A. Equilateral Triangle</p>  <p>60° 6 cm 6 cm 60° 60° 6 cm</p>	<p>B. Obtuse Scalene Triangle</p>  <p>8 cm 20° 5 cm 30° 130° 4 cm</p>
<p>C. Right Scalene Triangle</p>  <p>52° 5 cm 9 cm 90° 38° 7 cm</p>	<p>D. Acute Scalene Triangle</p>  <p>80° 4 cm 6 cm 62° 38° 7 cm</p>
<p>E. Right Isosceles Triangle</p>  <p>7 cm 45° 45° 5 cm 90° 5 cm</p>	<p>F. Obtuse Isosceles Triangle</p>  <p>4 cm 128° 4 cm 26° 26° 8 cm</p>

*Unit 5, Activity 9, Dot Paper Geoboards*

Name: \_\_\_\_\_

Date: \_\_\_\_\_



*Unit 5, Activity 12, Properties of Geometric Figures*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Properties

Figure					

**Directions:**

On this *word grid* the first column has “figure” listed as the column heading. List the types of figures studied so far.

Think of properties of the geometric figures. This may include “has a right angle,” “has only three sides,” or other features.

In each box next to the type of graph, write A for always if the figure always has this feature, S for sometimes if the figure sometimes has this feature, or N for never if the figure never has this feature. Once completed, share your *word grid* with others and look for differences and similarities among geometric figures.

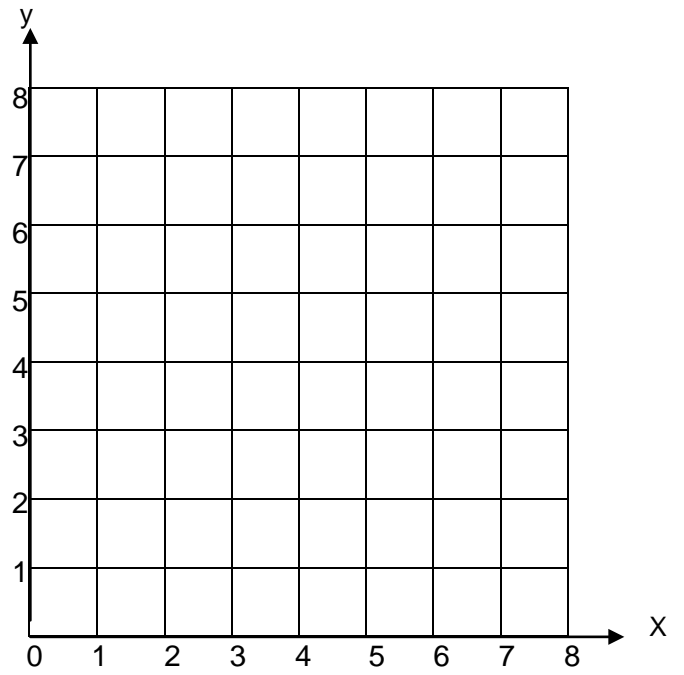
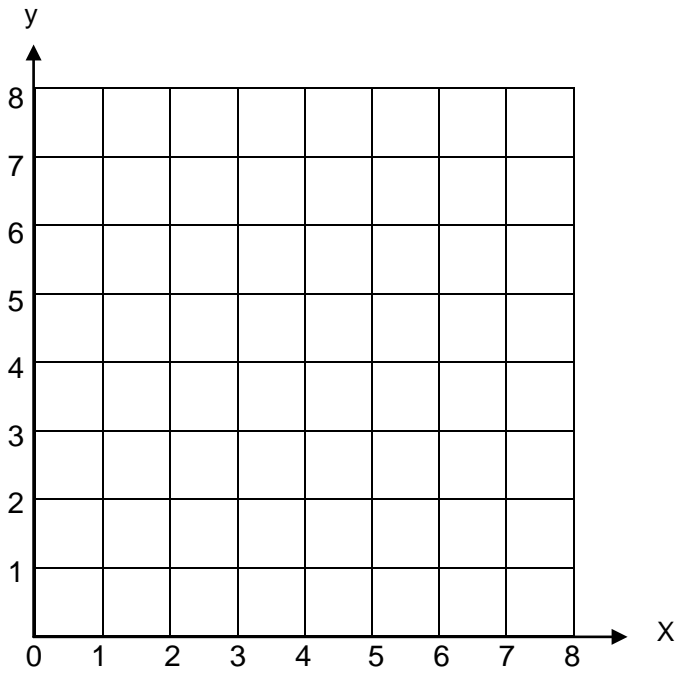
*Unit 5, Activity 14, Plot that Figure*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

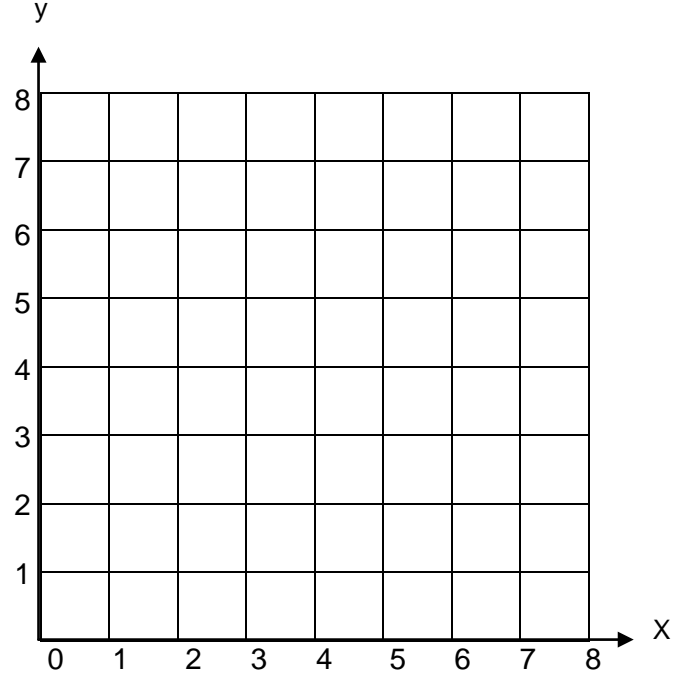
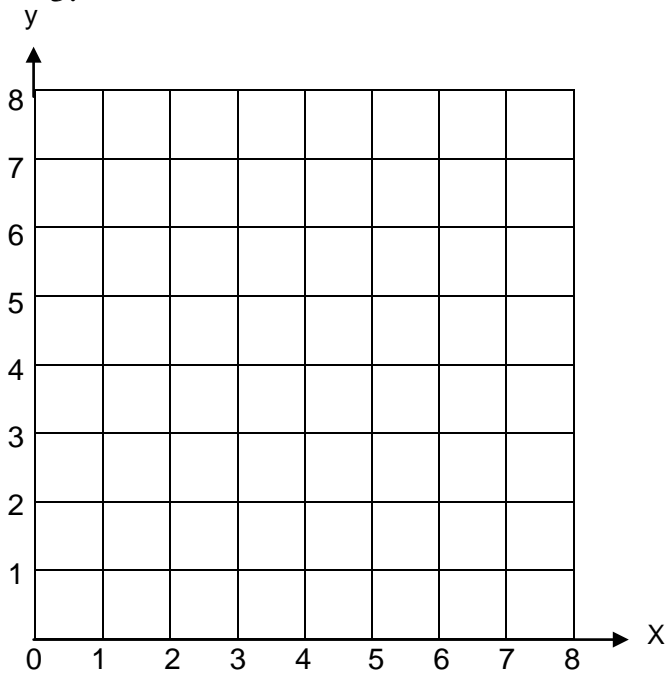
1.

2.



3.

4.



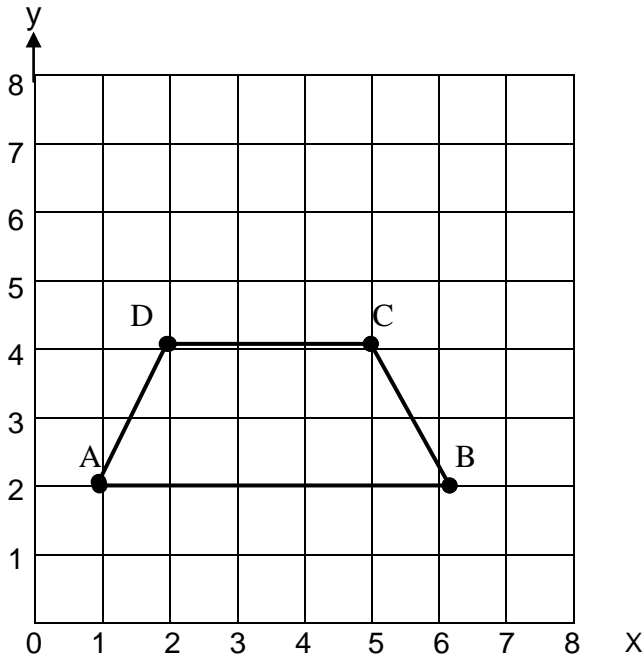


Unit 5, Activity 14, Plot that Figure with Answers

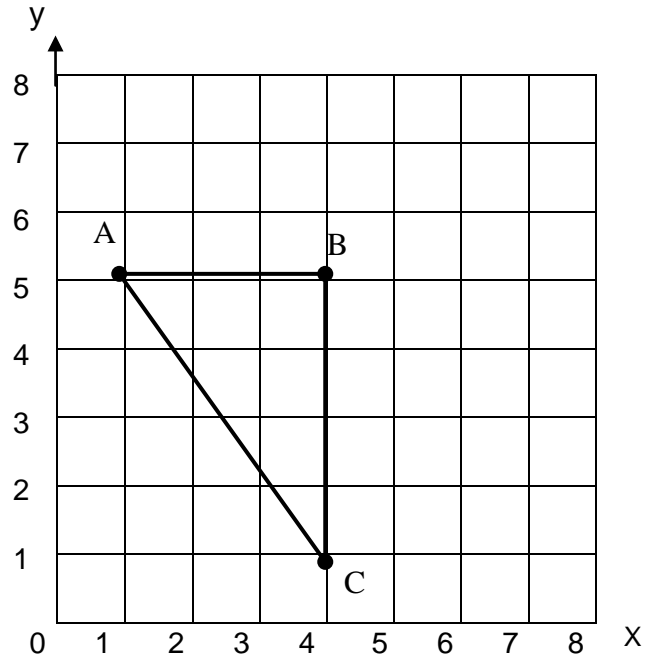
Name: \_\_\_\_\_

Date: \_\_\_\_\_

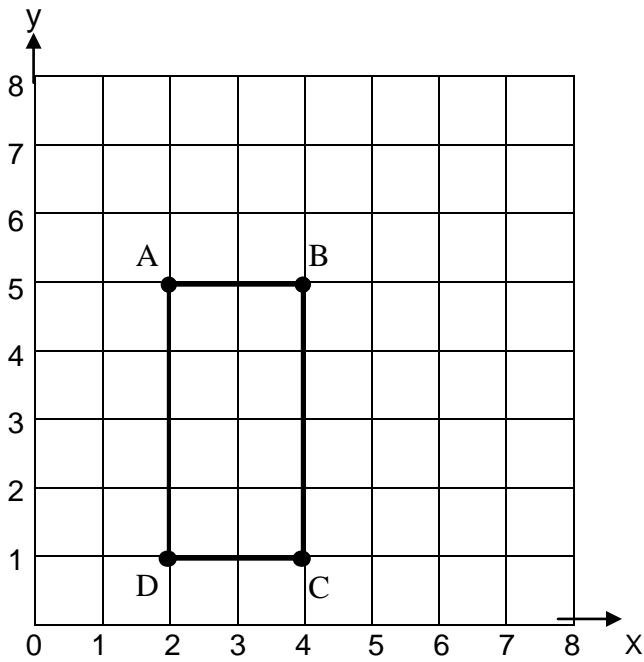
1.



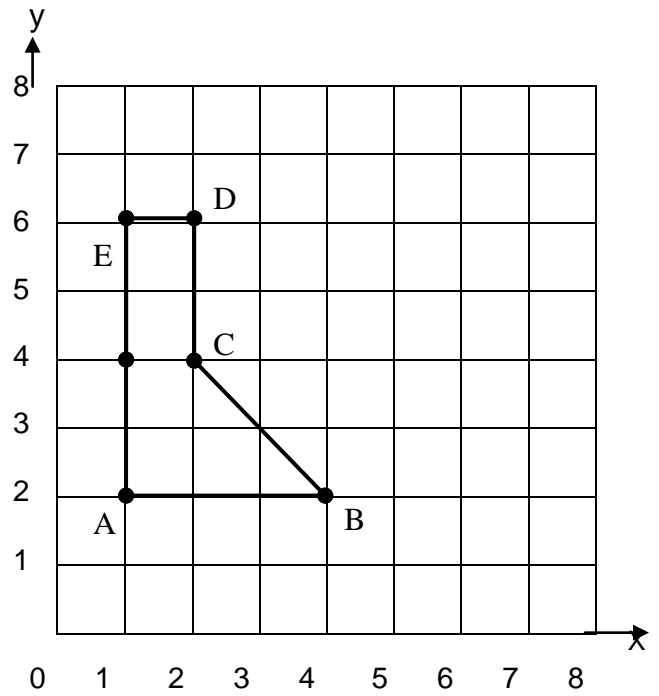
2.



3.



4.



*Unit 5, Activity 4, Specific Assessment, Angle Measures*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

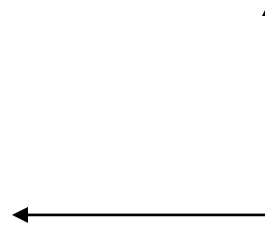
1.



Angle Measure \_\_\_\_\_

Type of Angle \_\_\_\_\_

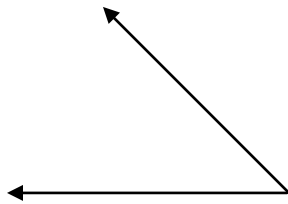
2.



Angle Measure \_\_\_\_\_

Type of Angle \_\_\_\_\_

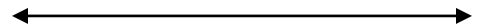
3.



Angle Measure \_\_\_\_\_

Type of Angle \_\_\_\_\_

4.



Angle Measure \_\_\_\_\_

Type of Angle \_\_\_\_\_

*Unit 5, Activity 4, Specific Assessment, Angle Measures with Answers*

Name: \_\_\_\_\_

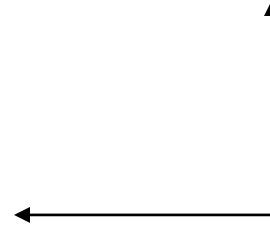
Date: \_\_\_\_\_

1.



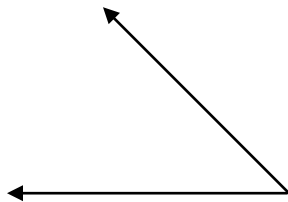
Angle Measure     $134^\circ$   
Type of Angle    obtuse

2.



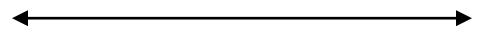
Angle Measure     $90^\circ$   
Type of Angle    right

3.



Angle Measure     $45^\circ$   
Type of Angle    acute

4.



Angle Measure     $180^\circ$   
Type of Angle    straight

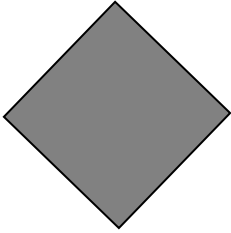
*Unit 5, Activity 6, Specific Assessment, Which Shape Does Not Belong?*

Name: \_\_\_\_\_

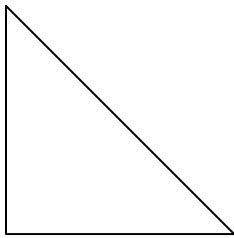
Date: \_\_\_\_\_

Decide which shape does not belong and explain why.

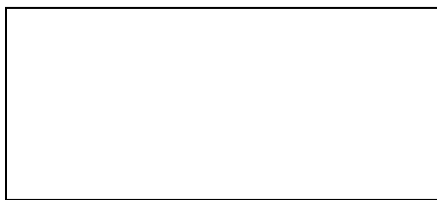
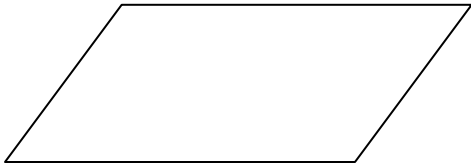
A.



B.



C.



**Unit 6, Activity 6, Conversions**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Object Measured	inches	feet	yards

Object Measured	millimeters	centimeters	meters

**Unit 6, Activity 7, Tables of Conversions**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Length**

**U.S.**

12 inches (in.) = 1 foot (ft)  
3 feet (ft) = 1 yard (yd)  
5280 feet (ft) = 1 mile

**Metric**

10 millimeters (mm) = 1 centimeter (cm)  
1000 millimeters (mm) = 1 meter (m)  
100 centimeters (cm) = 1 meter (m)  
1000 meters (m) = 1 kilometer (km)

**Weight/Mass**

**U.S.**

16 ounces (oz) = 1 pound (lb)  
2000 pounds (lb) = 1 ton (T)

**Metric**

1000 milligrams (mg) = 1 gram  
1000 grams (g) = 1 kilogram (kg)

**Capacity**

**U.S.**

8 fluid ounces (fl oz) = 1 cup (c)  
2 cups (c) = 1 pint (pt)  
2 pints (pt) = 1 quart (qt)  
4 quarts (qt) = 1 gallon (gal)

**Metric**

1000 milliliters (mL) = 1 liter (L)  
1000 liters (L) = 1 kiloliter (kL)

**Time**

**U.S.**

60 seconds (s) = 1 minute (min)  
60 minutes (min) = 1 hour (hr)  
24 hours (hr) = 1 day (d)  
7 days (d) = 1 week (wk)  
about 4 weeks (wk) = 1 month (mo)  
12 months (mo) = 1 year (yr)  
52 weeks (wk) = 1 year (yr)  
365 days (d) = 1 year (yr)

**Unit 7, Activity 2, Make That Fraction**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Description</b>	<b>Fraction</b>
1. A fraction $> 1$	_____
2. A fraction in simplest form	_____
3. A fraction $< \frac{1}{2}$	_____
4. A fraction $> \frac{1}{2}$	_____
5. A fraction equivalent to 1.5	_____
6. A fraction $< 1$	_____
7. A fraction $= \frac{1}{2}$	_____
8. A fraction equivalent to $1\frac{1}{4}$	_____
9. A fraction $= 1$	_____
10. A fraction between 1 and 2	_____

*Unit 7, Activity 2, Fractions and Decimals Anticipation Guide Statements*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Fractions and Decimals Anticipation Guide Statements

1. All improper fractions are greater than 1.  
True \_\_\_\_\_ False \_\_\_\_\_
2. One-fourth can be greater than one-half.  
True \_\_\_\_\_ False \_\_\_\_\_
3. All fractions with denominators of 100 can be written as decimals.  
True \_\_\_\_\_ False \_\_\_\_\_
4. All improper fractions can only be written as whole numbers.  
True \_\_\_\_\_ False \_\_\_\_\_
5. Fractions and decimals both indicate parts of a whole.  
True \_\_\_\_\_ False \_\_\_\_\_



*Unit 7, Activity 2, Fractions and Decimals Anticipation Guide Statements with Answers and Explanations*

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Fractions and Decimals Anticipation Guide Statements

1. All improper fractions are greater than 1.

True \_\_\_\_\_ False X

An improper fraction can be equal to or greater than one. If the numerator of a fraction is equal to or greater than the denominator, the fraction is an improper fraction.

2. One-fourth can be greater than one-half.

True X False \_\_\_\_\_

The size of the fraction depends on the size of the whole. For instance, in comparing  $\frac{1}{4}$  of a grapefruit to  $\frac{1}{2}$  of a grape the fourth of the grapefruit would be larger than the half of a grape. This understanding can help the student see this property of fractions when working with numbers (i.e.,  $\frac{1}{4}$  of 40 (10) is greater than  $\frac{1}{2}$  of 10 (5).

3. All fractions with denominators of 100 can be written as decimals.

True X False \_\_\_\_\_

4. All improper fractions can only be written as whole numbers.

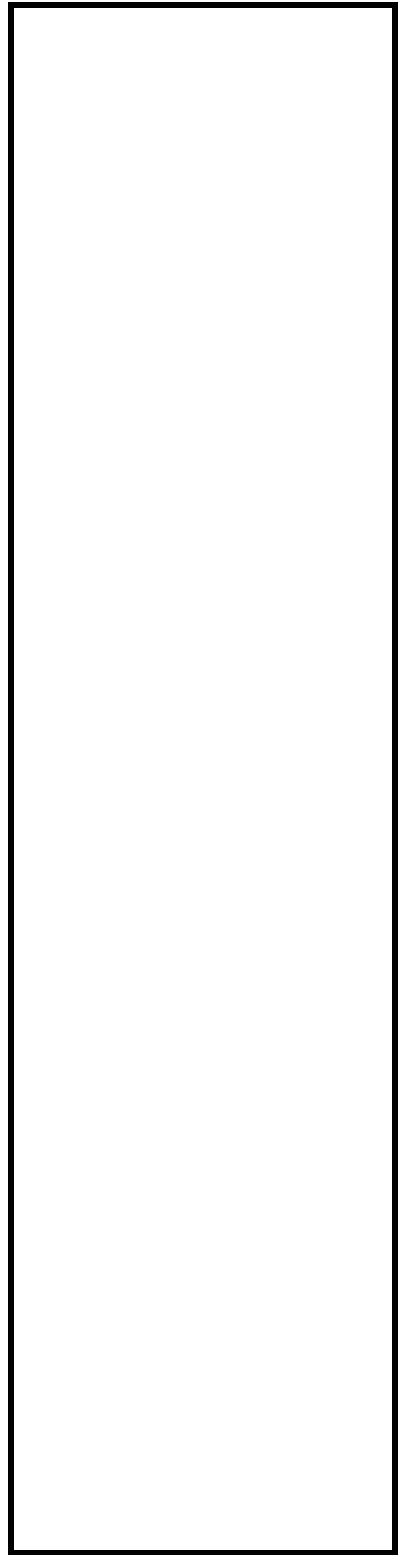
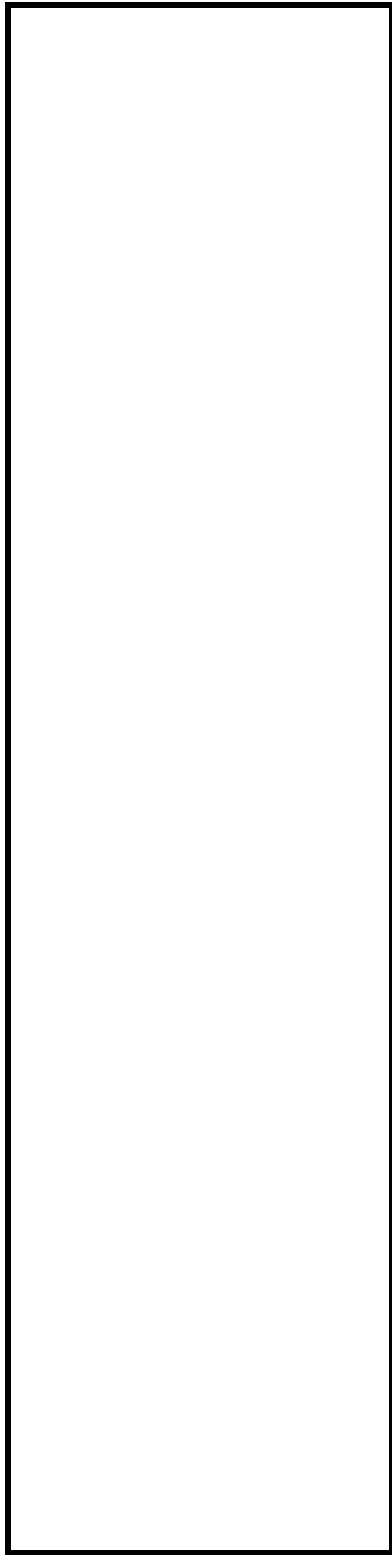
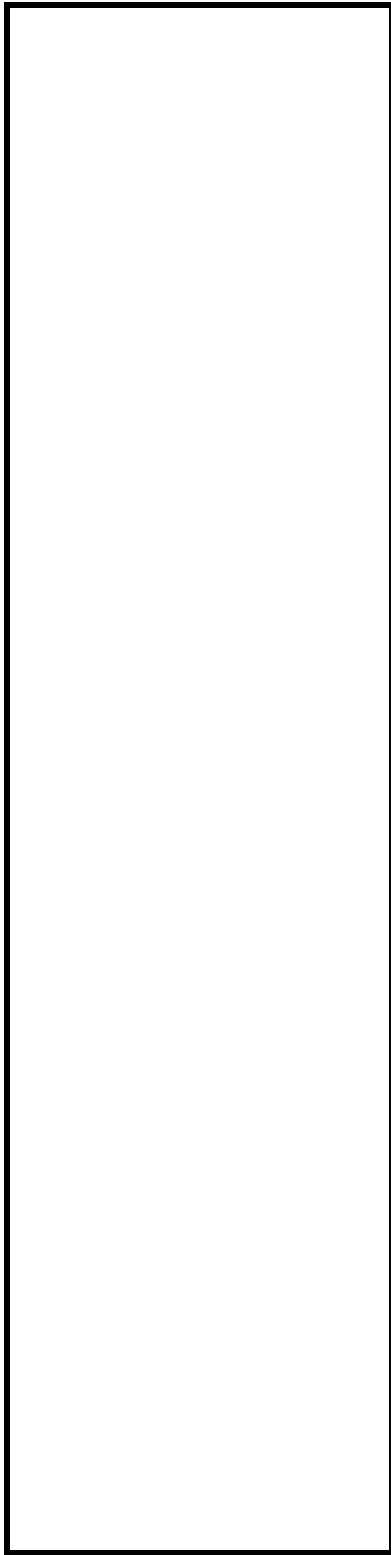
True \_\_\_\_\_ False X

Improper fractions can be written as a whole number when numerator and the denominator are the same number. But if the numerator is larger than the denominator, the improper fraction is written as a mixed number.

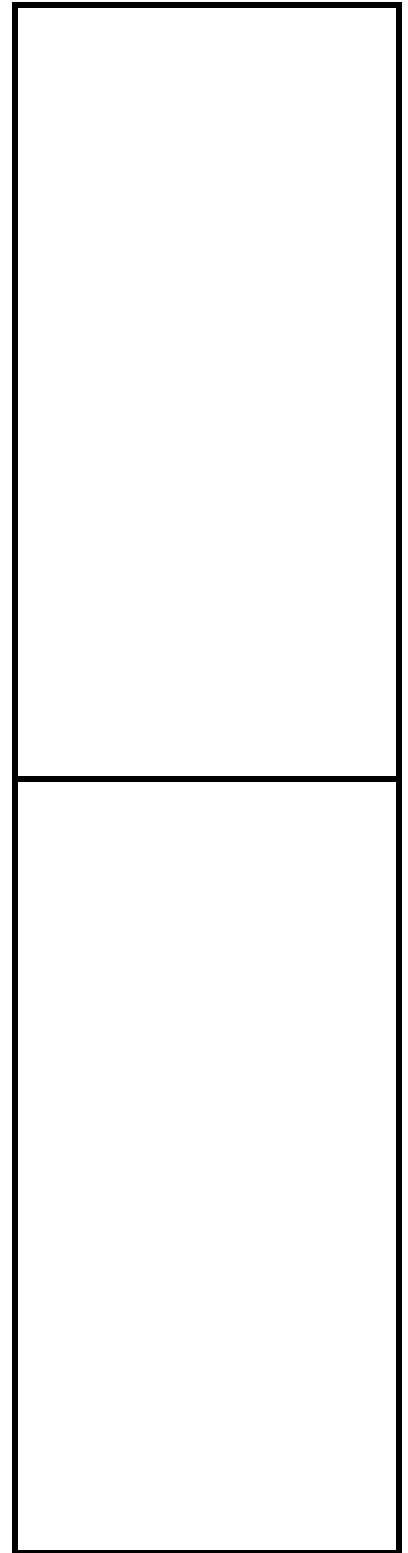
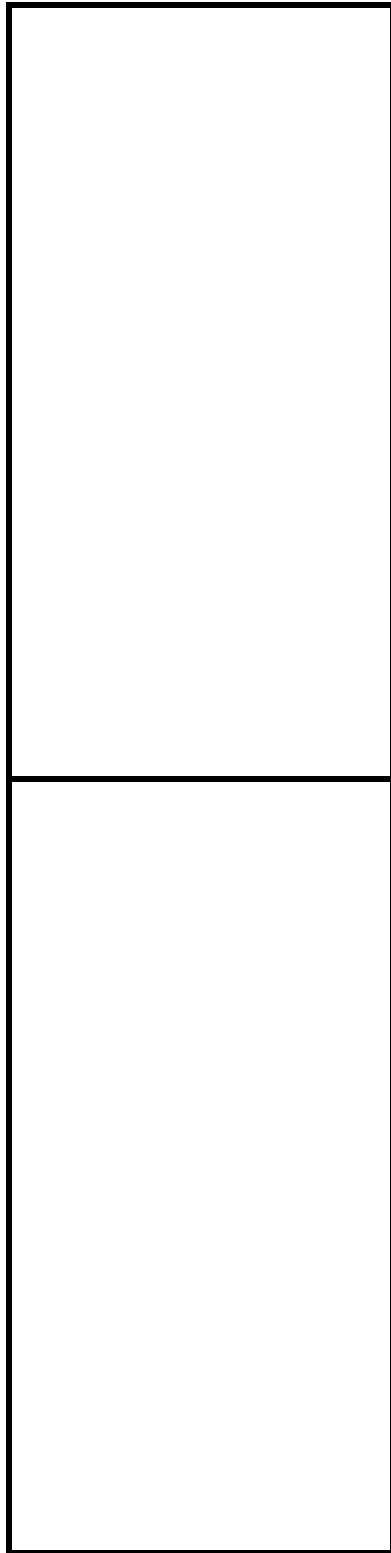
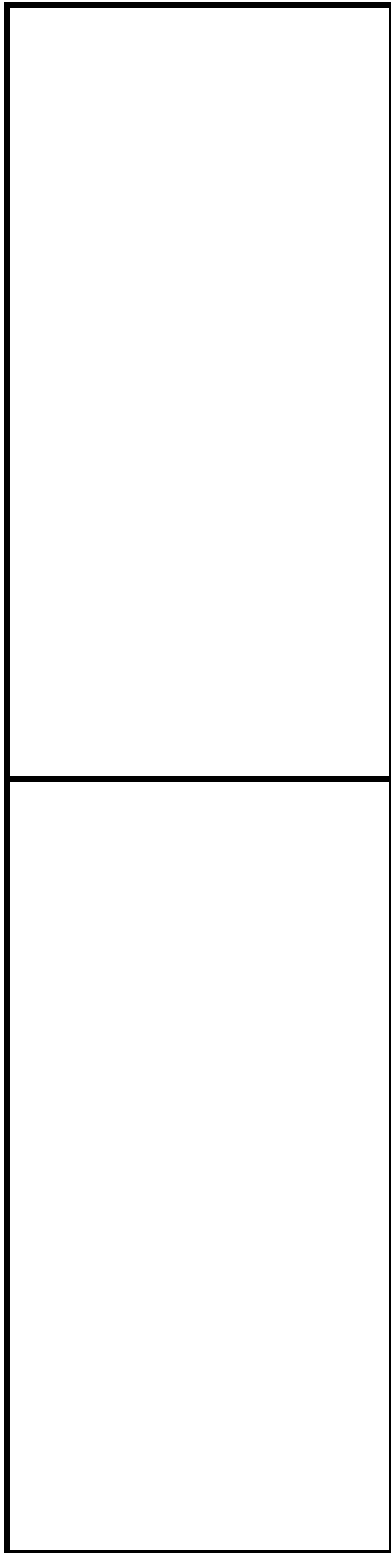
5. Fractions and decimals both indicate parts of a whole.

True X False \_\_\_\_\_

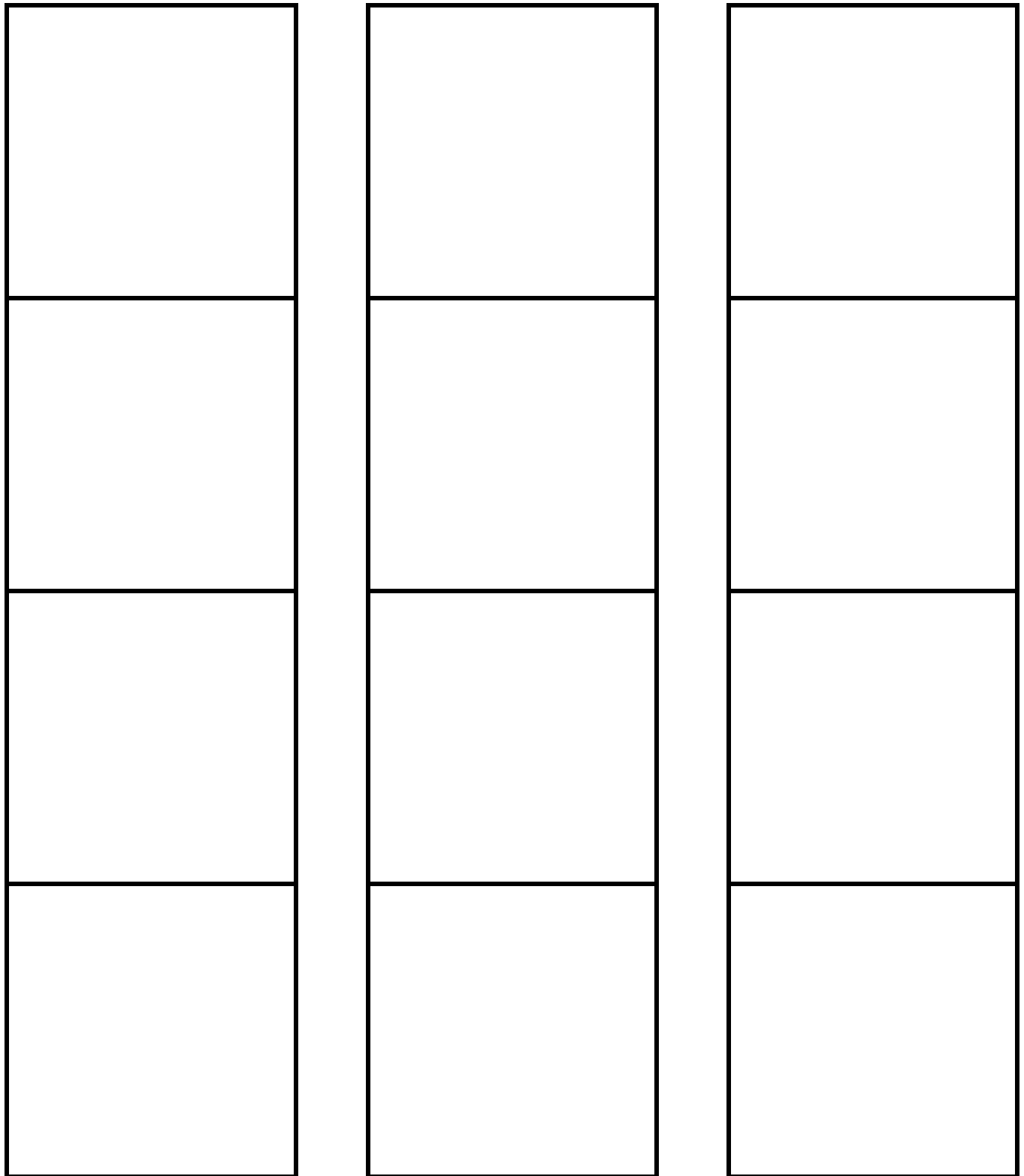
*Unit 7, Activities 3, 4, 5, and 6, Fraction Strips A*



*Unit 7, Activities 3, 4, 5, and 6, Fraction Strips B*



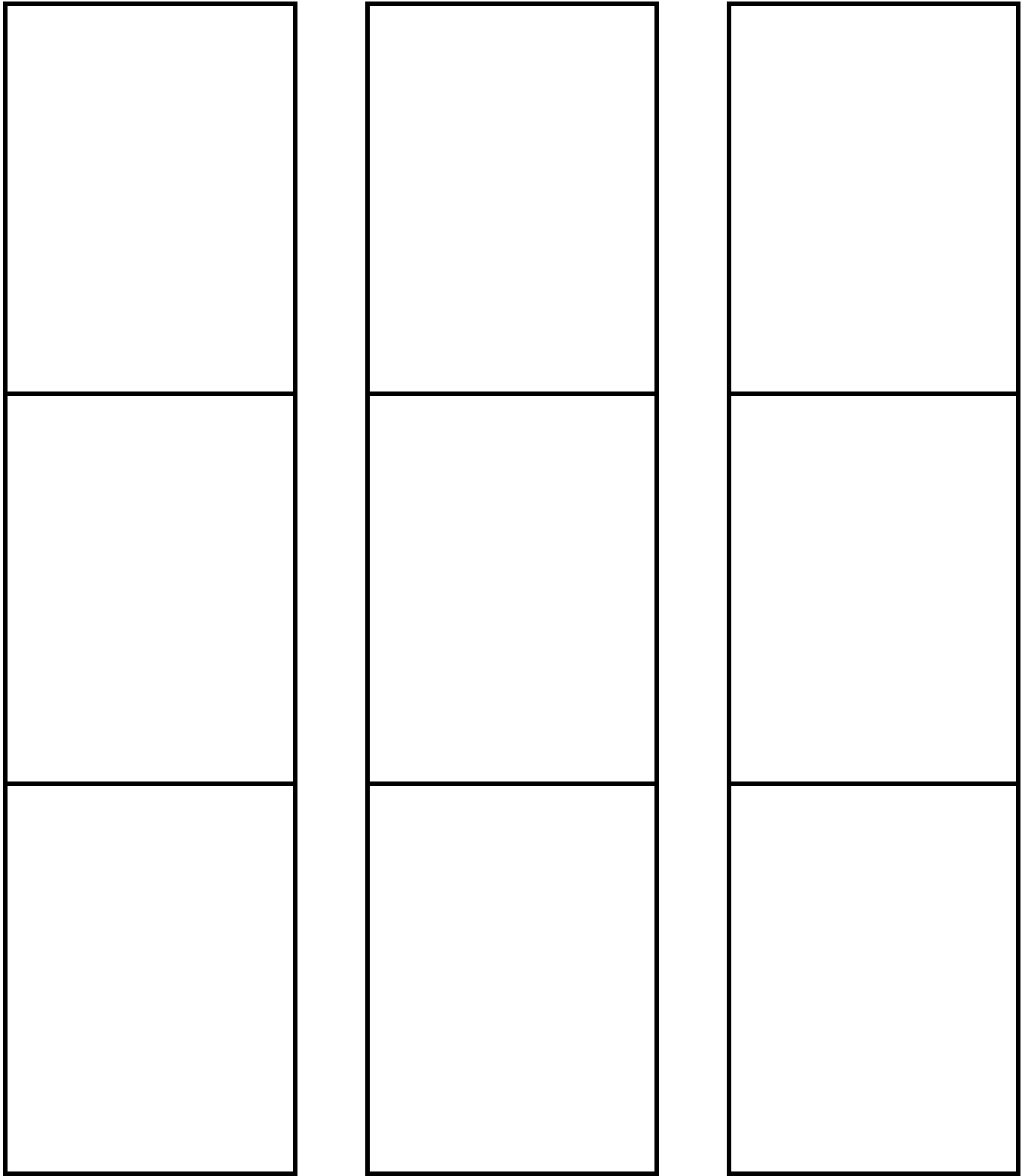
*Unit 7, Activities 3, 4, 5, and 6, Fraction Strips C*



*Unit 7, Activities 3, 4, 5, and 6, Fraction Strips D*




*Unit 7, Activities 3, 4, 5, and 6, Fraction Strips E*



*Unit 7, Activities 3, 4, 5, and 6, Fraction Strips F*

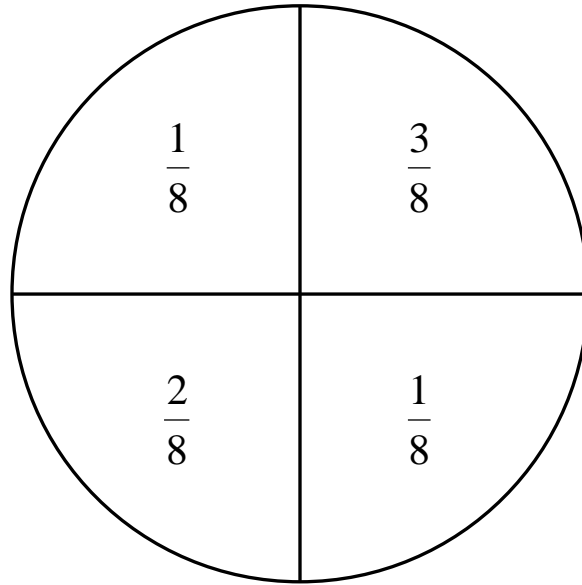
The image displays three identical vertical fraction strips arranged horizontally. Each strip is a tall rectangle divided into seven equal horizontal sections by six horizontal lines. The strips are completely blank, intended for students to draw or label fractions.

*Unit 7, Activity 3, Fraction Spinner*

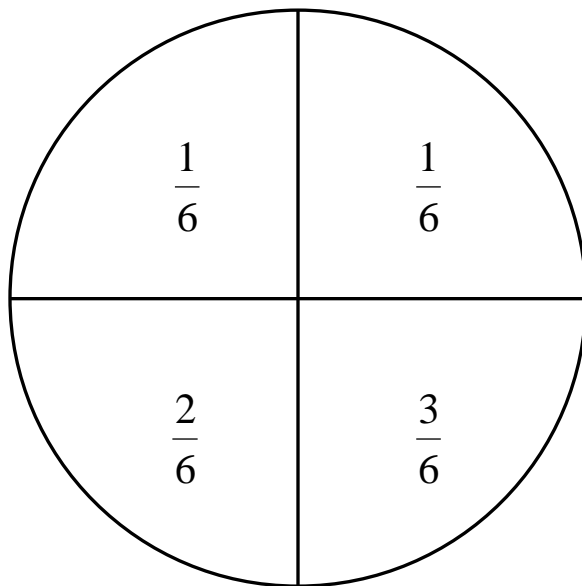
Name: \_\_\_\_\_

Date: \_\_\_\_\_

A.



B.



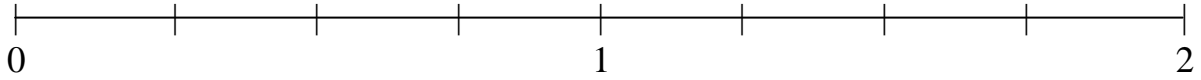


*Unit 7, Activities 7 and 14, Number Lines*

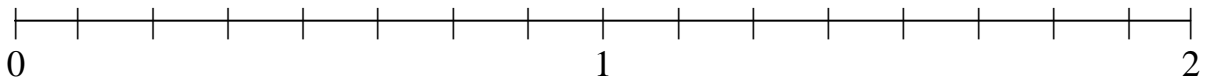
Name: \_\_\_\_\_

Date: \_\_\_\_\_

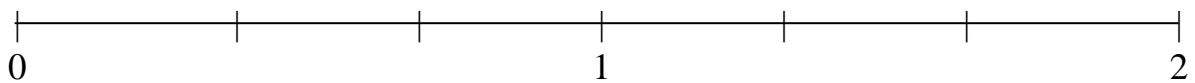
A.



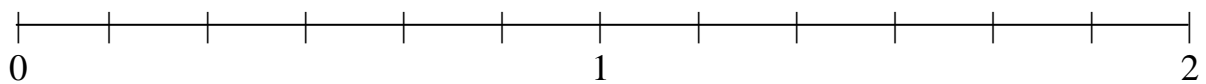
B.



C.



D.



**Unit 7, Activity 9, Visually Representing Word Problems**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Visually Representing Word Problems**

**Word Problem One:** Sarah and John worked at the ABC Pickle Packing Company. They work on the same shift and tonight, Sarah packed  $\frac{4}{12}$  of the pickles using an automated machine. John packed  $\frac{3}{12}$  of the pickles by hand. How many of the pickles did they pack together?

**First Sentence:** Sarah and John worked at the ABC Pickle Packing Company.

\_\_\_\_\_

\_\_\_\_\_

**Second Sentence:** They work on the same shift and tonight, Sarah packed  $\frac{4}{12}$  of the pickles using an automated machine.

\_\_\_\_\_

\_\_\_\_\_

**Third Sentence:** John packed  $\frac{3}{12}$  of the pickles by hand.

\_\_\_\_\_

\_\_\_\_\_

**Word Problem Two:** Tamika decided to pick apples from a public orchard a few hours before they closed. She was able to pick  $\frac{9}{10}$  of the amount of apples she wanted before closing. On the way home, she ate  $\frac{3}{10}$  of the apples she picked. How much of the apples did she have left when she returned home?

**First Sentence:** Tamika decided to pick apples from a public orchard a few hours before they closed.

\_\_\_\_\_

\_\_\_\_\_

**Second Sentence:** She was able to pick  $\frac{9}{10}$  of the amount of apples she wanted before closing.

\_\_\_\_\_

\_\_\_\_\_

**Third Sentence:** On the way home, she ate  $\frac{3}{10}$  of the apples she picked.

\_\_\_\_\_

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*Unit 7, Activity 9, Visually Representing Word Problems*

Use  $\frac{3}{8} + \frac{4}{8}$  to create a word problem: \_\_\_\_\_

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**First sentence:**

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**Second Sentence:**

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**Third Sentence:**

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Use  $\frac{4}{5} - \frac{2}{5}$  to create a word problem: \_\_\_\_\_

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**First Sentence:**

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**Second Sentence:**

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*Unit 7, Activity 9, Visually Representing Word Problems*

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**Third Sentence:**

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Use  $\frac{3}{9} + \frac{7}{9}$  to create a word problem: \_\_\_\_\_

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**First Sentence:**

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**Second Sentence:**

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**Third Sentence:**

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**Unit 7, Activity 9, Visually Representing Word Problems Suggested Answers**

Visually Representing Word Problems Suggested Answers

**Word Problem One:** Sarah and John worked at the ABC Pickle Packing Company. They work on the same shift and tonight, Sarah packed  $\frac{4}{12}$  of the pickles using an automated machine. John packed  $\frac{3}{12}$  of the pickles by hand. How many of the pickles did they pack together?

**First Sentence:** Sarah and John worked at the ABC Pickle Packing Company.

Sarah                      and                      John                      worked                      at  
the                      pickle                      company.                      \_\_\_\_\_

**Second Sentence:** They work on the same shift and tonight, Sarah packed  $\frac{4}{12}$  of the pickles using an automated machine.

Sarah                      picked                       $\frac{4}{12}$                       pickles                      where  
she                      and                      John                      worked.                      \_\_\_\_\_

**Third Sentence:** John packed  $\frac{3}{12}$  of the pickles by hand.

Together                      Sarah                      and                      John                      picked  
 $\frac{4}{12}$                       and                       $\frac{3}{12}$                       pickles.                      \_\_\_\_\_

**Word Problem Two:** Tamika decided to pick apples from a public orchard a few hours before they closed. She was able to pick  $\frac{9}{10}$  of the amount of apples she wanted before closing. On the way home, she ate  $\frac{3}{10}$  of the apples she picked. How much of the apples did she have left when she returned home?

**First Sentence:** Tamika decided to pick apples from a public orchard a few hours before they closed.

Tamika                      decided                      to                      pick                      apples  
from                      an                      orchard.                      \_\_\_\_\_

**Second Sentence:** She was able to pick  $\frac{9}{10}$  of the amount of apples she wanted before closing.

Tamika                      picked                       $\frac{9}{10}$                       of                      the  
apples                      she                      wanted                      before                      closing.

**Third Sentence:** On the way home she ate  $\frac{3}{10}$  of the apples she picked.

Tamika                      picked                       $\frac{9}{10}$                       of                      the  
apples                      and                      ate                       $\frac{3}{10}$ .                      \_\_\_\_\_

Use  $\frac{3}{8} + \frac{4}{8}$  to create a word problem: Answers will vary. Problems will show a scenario where the fraction  $\frac{3}{8}$  is added to  $\frac{4}{8}$ .

**First sentence:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Unit 7, Activity 9, Visually Representing Word Problems Suggested Answers*

**Second Sentence:**

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**Third Sentence:**

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Use  $\frac{4}{5} - \frac{2}{5}$  to create a word problem: Answers will vary. Problems will show a scenario where the fraction  $\frac{4}{5}$  is subtracted from  $\frac{2}{5}$ .

**First Sentence:**

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**Second Sentence:**

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**Third Sentence:**

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Use  $\frac{3}{9} + \frac{7}{9}$  to create a word problem: Answers will vary. Problems will show a scenario where the fraction  $\frac{3}{9}$  is added to  $\frac{7}{9}$ .

**First Sentence:**

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**Second Sentence:**

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**Third Sentence:**

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Unit 7, Activity 10, Fraction Pieces

1 WHOLE
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$\frac{1}{2}$	$\frac{1}{2}$
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$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$
---------------	---------------	---------------

$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
---------------	---------------	---------------	---------------

$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$
---------------	---------------	---------------	---------------	---------------

$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$
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$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$
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$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$	$\frac{1}{9}$
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$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$
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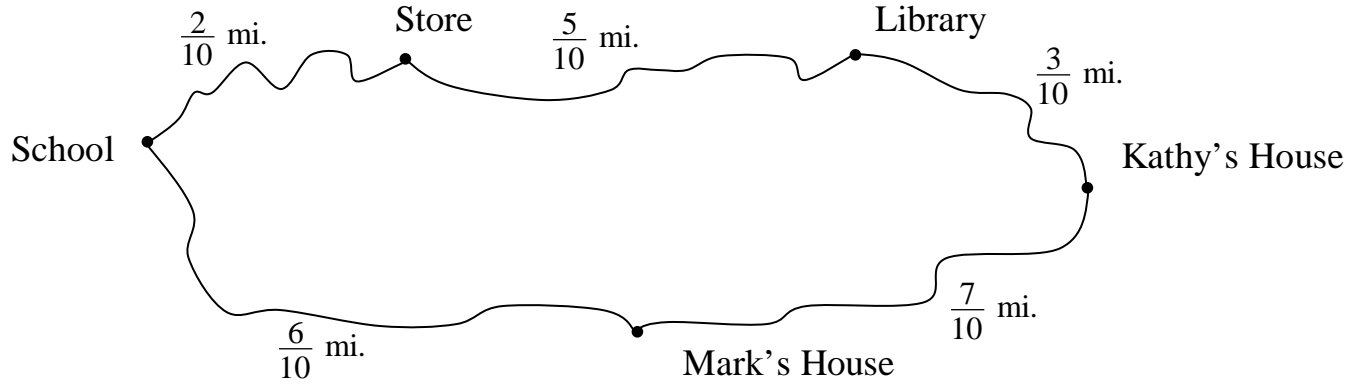
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$
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*Unit 7, Activity 12, How Far Is It?*

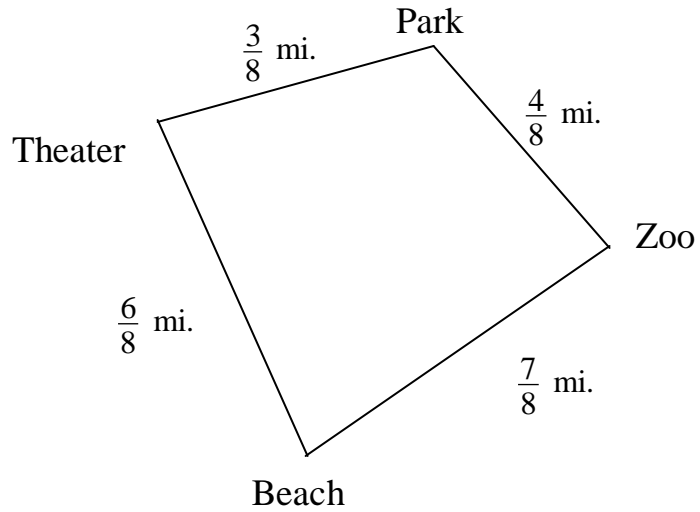
Name: \_\_\_\_\_

Date: \_\_\_\_\_

Map A



Map B





**Unit 7, Activity 13, Who Are We?**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Use the fractions in the box to find two answers to fit each statement.

$\frac{1}{4}$	$\frac{2}{8}$	$\frac{10}{10}$	$\frac{2}{4}$	$\frac{2}{2}$	$\frac{5}{8}$
$\frac{5}{10}$	$\frac{7}{8}$	$\frac{1}{1}$	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{4}{8}$	$\frac{4}{4}$	$\frac{6}{8}$	$\frac{9}{10}$	$\frac{8}{8}$

1. A fraction between  $\frac{1}{4}$  and  $\frac{5}{8}$  \_\_\_\_\_
2. A fraction less than  $\frac{1}{2}$  \_\_\_\_\_
3. Two fractions whose sum is 1 \_\_\_\_\_
4. Two fractions whose sum is  $1\frac{1}{2}$  \_\_\_\_\_
5. Two fractions whose difference is almost 0 \_\_\_\_\_
6. Two fractions whose sum is almost 1 \_\_\_\_\_
7. Two fractions whose difference is  $\frac{3}{8}$  \_\_\_\_\_
8. Two fractions whose sum is  $\frac{8}{8}$  \_\_\_\_\_
9. Two fractions whose difference is  $\frac{2}{4}$  \_\_\_\_\_
10. Two fractions whose sum is greater than 1 \_\_\_\_\_

**Unit 7, Activity 13, Who Are We? with Answers**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Use the fractions in the box to find two answers to fit each statement.

$\frac{1}{4}$	$\frac{2}{8}$	$\frac{10}{10}$	$\frac{2}{4}$	$\frac{2}{2}$	$\frac{5}{8}$
$\frac{5}{10}$	$\frac{7}{8}$	$\frac{1}{1}$	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{4}{8}$	$\frac{4}{4}$	$\frac{6}{8}$	$\frac{9}{10}$	$\frac{8}{8}$

*Sample Answers*

1. A fraction between  $\frac{1}{4}$  and  $\frac{5}{8}$   $\frac{2}{4}, \frac{3}{8}$

2. A fraction less than  $\frac{1}{2}$   $\frac{1}{4}$  or  $\frac{3}{8}$

3. Two fractions whose sum is 1  $\frac{1}{4} + \frac{3}{4}$  or  $\frac{1}{8} + \frac{7}{8}$

4. Two fractions whose sum is  $1\frac{1}{2}$   $\frac{1}{1} + \frac{1}{2}$  or  $\frac{2}{2} + \frac{1}{2}$

5. Two fractions whose difference is almost 0  $\frac{7}{8} - \frac{6}{8}$  or  $\frac{10}{10} - \frac{9}{10}$

6. Two fractions whose sum is almost 1  $\frac{1}{8} + \frac{6}{8}$  or  $\frac{2}{8} + \frac{5}{8}$

7. Two fractions whose difference is  $\frac{3}{8}$   $\frac{8}{8} - \frac{5}{8}$  or  $\frac{7}{8} - \frac{4}{8}$

8. Two fractions whose sum is  $\frac{8}{8}$   $\frac{1}{8} + \frac{7}{8}$  or  $\frac{2}{8} + \frac{6}{8}$

9. Two fractions whose difference is  $\frac{2}{4}$   $\frac{4}{4} - \frac{2}{4}$  or  $\frac{3}{4} - \frac{1}{4}$

10. Two fractions whose sum is greater than 1  $\frac{2}{4} + \frac{3}{4}$  or  $\frac{4}{8} + \frac{5}{8}$

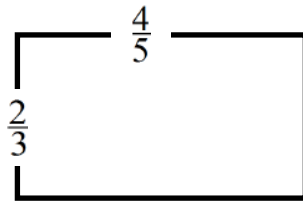
**Unit 8, Activity 4, Area Model of Multiplication with Fractions**

Name: \_\_\_\_\_

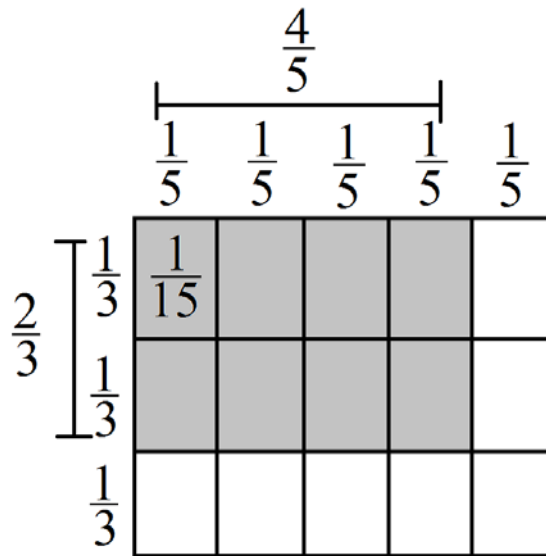
Date: \_\_\_\_\_

**Process Guide: Area Model for Fraction by Fraction Multiplication Problems**

1. **Explore:** What would you do to find the area of this rectangle? ( $Area = length \times width$ )



2. Multiplying  $\frac{4}{5}$  by  $\frac{2}{3}$  will give a product less than  $\frac{4}{5}$ . How do you know that this statement is true? Try breaking the rectangle into smaller rectangle sections. You can visualize the area's being 3 by 5 small rectangles each with a length of  $\frac{1}{5}$  and a width of  $\frac{1}{3}$ .



**Explain:** Explain how the smaller rectangle sections of the whole are used to solve the problem.

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3. **Understand:** Answer the following questions to better understand the process.

- a. Why are the fractions  $\frac{4}{5}$  and  $\frac{2}{3}$  expressed as unit fractions?

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**Unit 8, Activity 4, Area Model of Multiplication with Fractions**

- b. Why were  $5/5$  used for the length and  $3/3$  used for the width of the large rectangle when  $4/5$  and  $2/3$  are the fractions needed?

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- c. Why were only 8 of the 15 smaller rectangles used in the area?

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- d. What is the product? \_\_\_\_\_

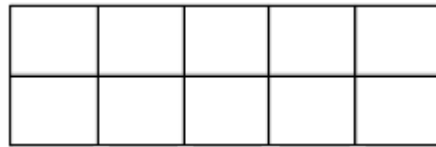
- e. **Conclusion:** How is the Area Model of multiplication used to solve the multiplication with fractions?

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4. **Apply:** Apply the Area Model of multiplication method to solve  $2/5 \times 1/2$ . Use the grid below to solve.



5. **Reason:** Would multiplying the numerator 2 by the numerator 1 and the denominator 5 by the denominator 2 give the same answer as your area model? Why is this so?

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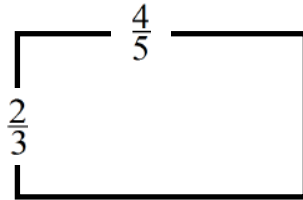
**Unit 8, Activity 4, Area Model of Multiplication with Fractions with Answers**

Name: \_\_\_\_\_

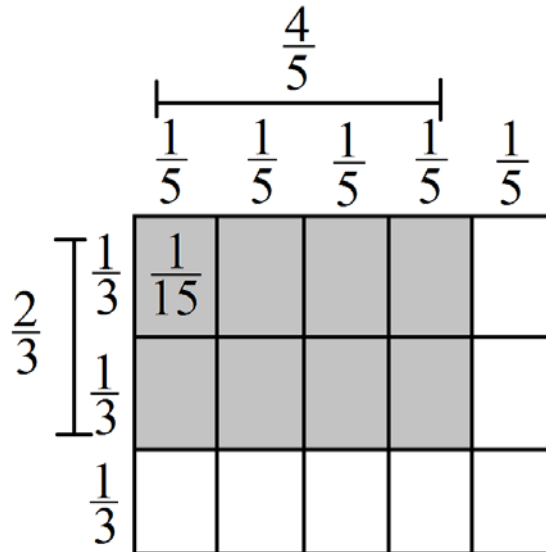
Date: \_\_\_\_\_

**Process Guide: Area Model for Fraction by Fraction Multiplication Problems**

1. **Explore:** What would you do to find the area of this rectangle? ( $Area = length \times width$ )



2. Multiplying  $\frac{4}{5}$  by  $\frac{2}{3}$  will give a product less than  $\frac{4}{5}$ . How do you know that this statement is true? Try breaking the rectangle into smaller rectangle sections. You can visualize the area's being 3 by 5 small rectangles each with a length of  $\frac{1}{5}$  and a width of  $\frac{1}{3}$ .



**Explain:** Explain how the smaller rectangle sections of the whole are used to solve the problem.

*Each rectangle section represents  $\frac{1}{5}$  of the length and  $\frac{1}{3}$  of the width. The fraction  $\frac{4}{5}$  is expanded into  $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$  and the fraction  $\frac{2}{3}$  is expanded into  $\frac{1}{3} + \frac{1}{3}$ .*

*The area of each of the eight little rectangles is found.*

3. **Understand:** Answer the following questions to better understand the process.

- a. How are the fractions  $\frac{4}{5}$  and  $\frac{2}{3}$  expressed? Why are they expressed that way?

*The fraction  $\frac{4}{5}$  and  $\frac{2}{3}$  are expressed as unit fractions. Each small rectangle is one square unit ( $\frac{1}{15}$ ) of the whole with an area of  $\frac{1}{5} \times \frac{1}{3}$ .*

**Unit 8, Activity 4, Area Model of Multiplication with Fractions with Answers**

- b. Why were  $5/5$  used for the length and  $3/3$  used for the width of the large rectangle when  $4/5$  and  $2/3$  are the fractions needed?

The area of the grid is one square unit ( $5/5 \times 3/3$ ).  $4/5$  and  $2/3$  represents the square units covered or shaded out of the square unit. Only a  $4/5 \times 2/3$  square area will be covered or shaded.

- c. Why were only 8 of the 15 smaller rectangles used in the area?

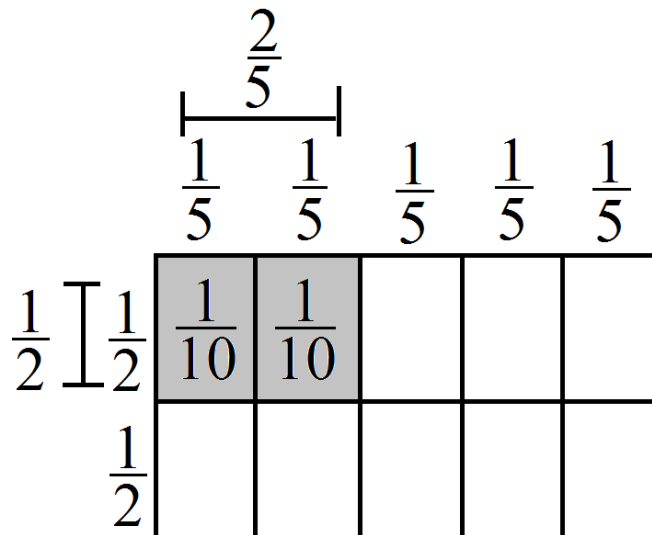
The 15 rectangles represent the whole square unit. Only 8 of the rectangles represent  $4/5 \times 2/3$ .

- d. What is the product?  $8/15$

- e. **Conclusion:** How is the Area Model of multiplication used to solve the multiplication with fractions?

The Area Model of multiplication visually shows how much a fraction represents.  $2/3 \times 4/5$  is represented by  $8/15$  of the whole.

4. **Apply:** Apply the Area Model of multiplication method to solve  $2/5 \times 1/2$ . Use the grid below to solve.

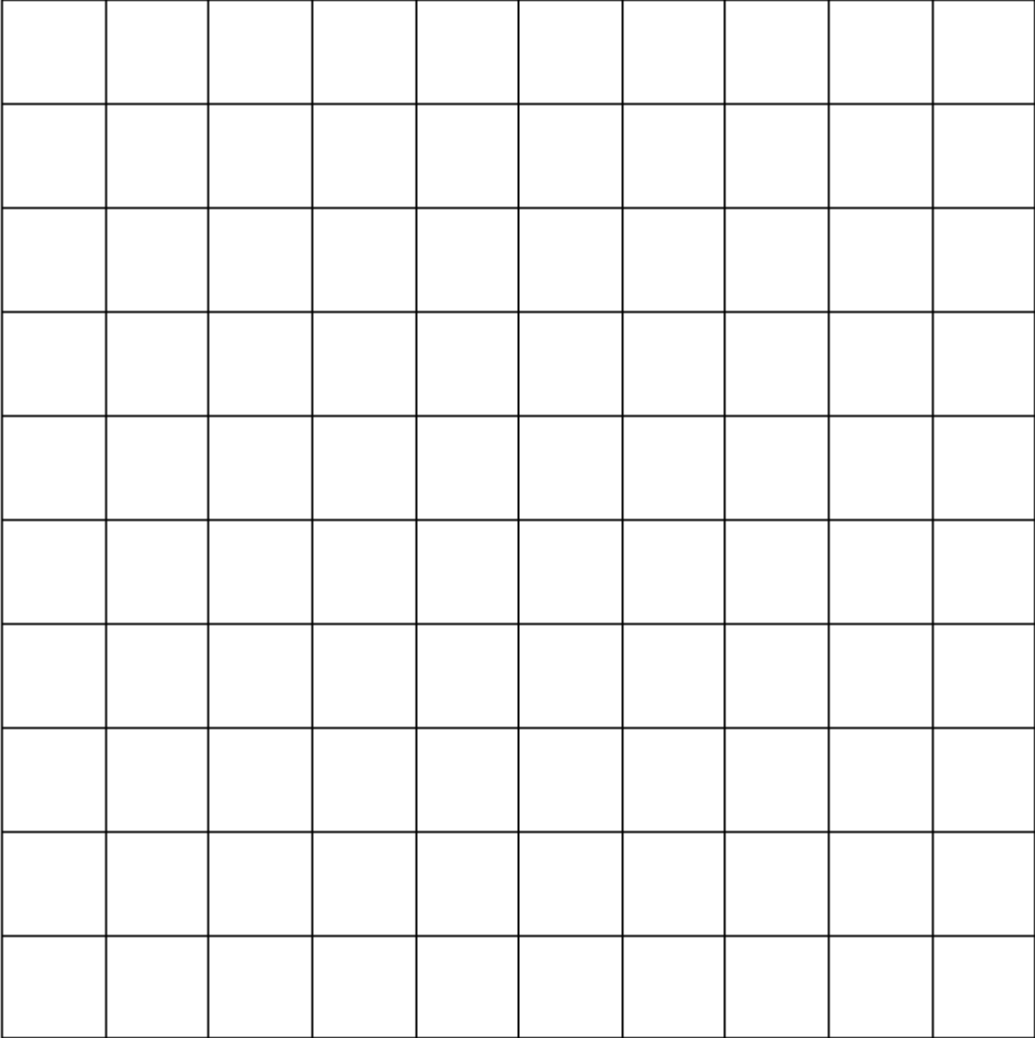


$2/5 \times 1/2 = 2/10 = 1/5$

5. **Reason:** Would multiplying the numerator 2 by the numerator 1 and the denominator 5 by the denominator 2 give the same answer as your area model? Why is this so?

Multiplying  $2/5 \times 1/2$  by multiplying the numerator by numerator and denominator by denominator will give the same answer as the area model.

*Unit 8, Activity 5, Grid Paper*



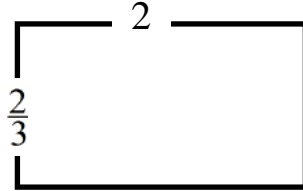
**Unit 8, Activity 6, More Area Model of Multiplication**

Name: \_\_\_\_\_

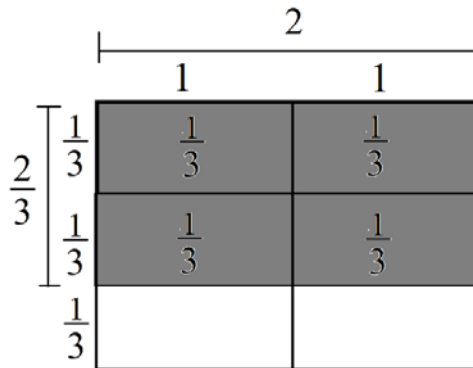
Date: \_\_\_\_\_

**Area Model for Whole Number by Fraction Multiplication Problems**

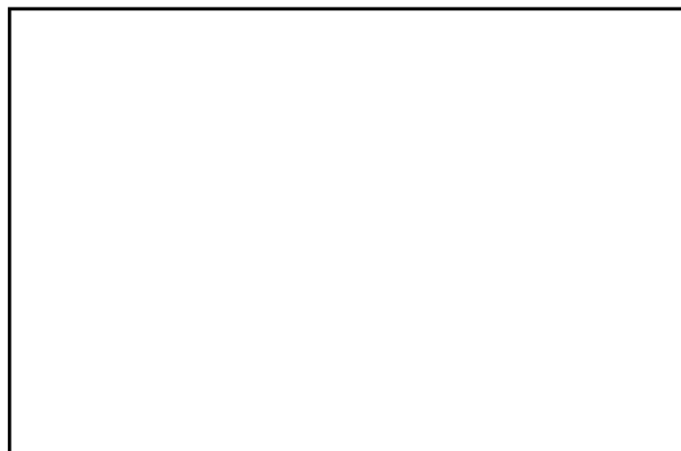
1. **Example:**  $2 \times \frac{2}{3} = ?$



Multiplying 2 and  $\frac{2}{3}$  will give a product less than 2. First, the rectangle is divided into 2 equal rectangles vertically, representing the number 2. Next, the two rectangles are divided into thirds by drawing horizontal lines to create three sections. This will make 6 equal sections, 3 sections in each rectangle. Each section is  $\frac{1}{3}$  of each rectangle. Two of the thirds are shaded on both rectangles to represent  $\frac{2}{3}$  of 2 or  $\frac{4}{3}$ .



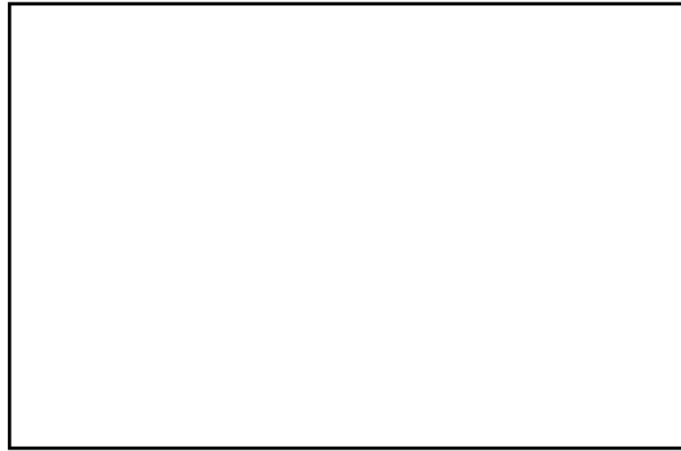
2. **Try It:**  $6 \times \frac{3}{4} =$  \_\_\_\_\_





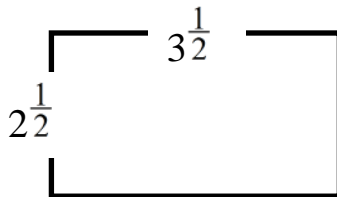
**Unit 8, Activity 6, More Area Model of Multiplication**

3. **Problem:**  $5 \times 4/5 =$  \_\_\_\_\_

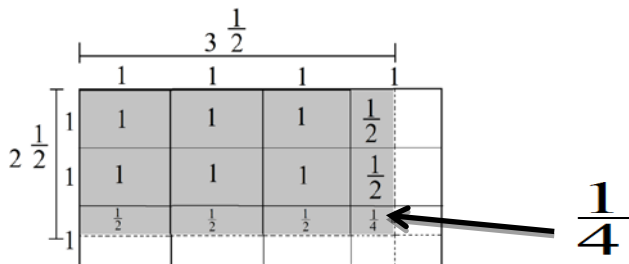


**Area Model for Mixed Number by Mixed Number Multiplication Problems**

4. **Example:**  $2 \frac{1}{2}$  groups of  $3 \frac{1}{2} = ?$

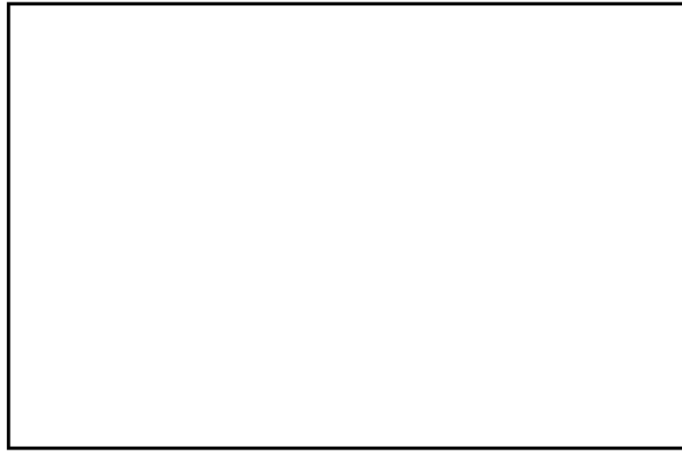


Multiplying  $2 \frac{1}{2}$  and  $3 \frac{1}{2}$  will give a product greater than 6. First, the large rectangle is divided into 4 rectangles vertically. Next, the large rectangle is divided into three rectangles horizontally. This will make 12 sections. The third section in the fourth vertical column is divided in half to represent the  $\frac{1}{2}$  of  $3 \frac{1}{2}$ . The sections in the third horizontal column are divided in half to represent the  $\frac{1}{2}$  of  $2 \frac{1}{2}$ . Notice, the last section in the rectangle has been divided into fourths. Three of the four squares are shaded horizontally along with  $\frac{1}{2}$  of the fourth square. Two of the three squares are shaded vertically along with  $\frac{1}{2}$  of the third square. This will give 6 whole sections, 5 half sections, and  $\frac{1}{4}$  section. ( $6 + 5/2 + 1/4 = 8 \frac{3}{4}$ ).



*Unit 8, Activity 6, More Area Model of Multiplication*

5. **Try It:**  $2\frac{1}{3} \times 4\frac{1}{2} =$  \_\_\_\_\_



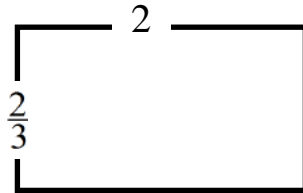
6. **Problem:**  $3\frac{1}{4} \times 5\frac{2}{5} =$  \_\_\_\_\_



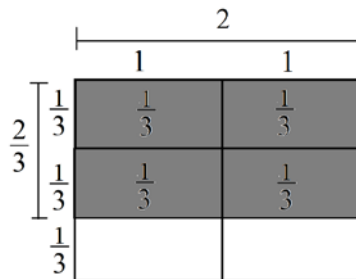
**Unit 8, Activity 6, More Area Model of Multiplication with Answers**

**Area Model for Whole Number by Fraction Multiplication Problems**

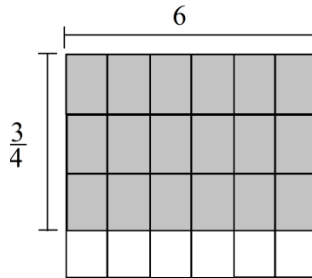
1. **Example:**  $2 \times \frac{2}{3} = ?$



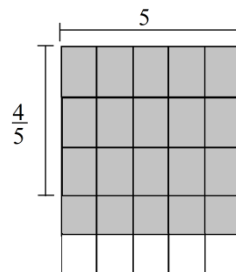
Multiplying 2 and  $\frac{2}{3}$  will give a product less than 2. First, the rectangle is divided into 2 equal rectangles vertically, representing the number 2. Next, the two rectangles are divided into thirds by drawing horizontal lines to create three sections. This will make 6 equal sections, 3 sections in each rectangle. Each section is  $\frac{1}{3}$  of each rectangle. Two of the thirds are shaded on both rectangles to represent  $\frac{2}{3}$  of 2 or  $\frac{4}{3}$ .



2. **Try It:**  $6 \times \frac{3}{4} = 4 \frac{1}{2}$  (Model shows  $\frac{18}{4}$ )

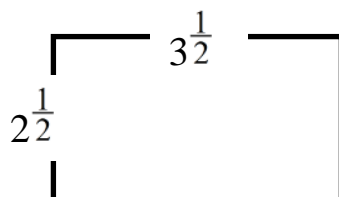


3. **Problem:**  $5 \times \frac{4}{5} = 20$  (Model shows  $\frac{20}{5}$ )



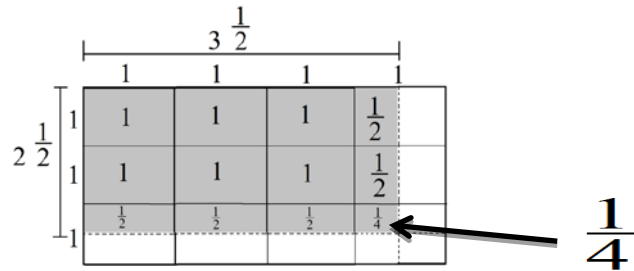
**Area Model for Mixed Number by Mixed Number Multiplication Problems**

4. **Example:**  $2 \frac{1}{2}$  groups of  $3 \frac{1}{2} = ?$

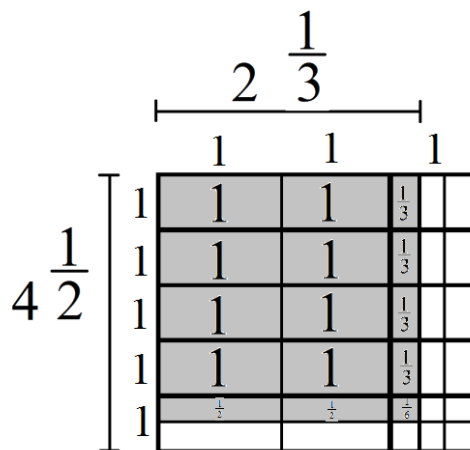


**Unit 8, Activity 6, More Area Model of Multiplication with Answers**

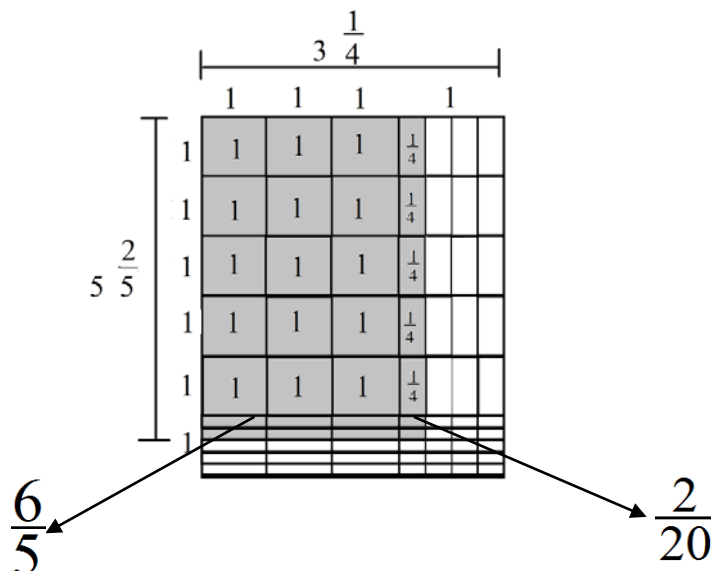
Multiplying  $2\frac{1}{2}$  and  $3\frac{1}{2}$  will give a product greater than 6. First, the rectangle is divided into 4 sections vertically. Next, the rectangle is divided into three sections horizontally. This will make 12 unit squares. The squares in the fourth vertical column are divided in half to represent the  $\frac{1}{2}$  of  $3\frac{1}{2}$ . The squares in the third horizontal column are divided in half to represent the  $\frac{1}{2}$  of  $2\frac{1}{2}$ . Notice, the last square in the rectangle has been divided into fourths. Three of the four squares are shaded horizontally along with  $\frac{1}{2}$  of the fourth square. Two of the three squares are shaded vertically along with  $\frac{1}{2}$  of the third square. Other squares are shaded to fill in the area. This will give 6 whole sections, 5 half sections, and  $\frac{1}{4}$ . ( $6 + 5/2 + 1/4 = 8\frac{3}{4}$ ).



5. **Try:**  $2\frac{1}{3} \times 4\frac{1}{2} = 10\frac{1}{2}$  (Model shows  $8 + 4/3 + 2/2 + 1/6$ )



6. **Try:**  $3\frac{1}{4} \times 5\frac{2}{5} = 17\frac{11}{20}$  (Model shows  $15 + 5/4 + 6/5 + 2/20$ )



**Unit 8, Activity 12, The Plot Thickens, Creating Line Plots**

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

**The Plot Thickens, Creating Line Plots**

Directions: You are an active character in these stories! Use what you know about creating line plots to create line plots needed to continue the story. Complete all your work in the time given and listen carefully to see how the story ends.

First Story: Mr. Johnston owns a small apartment complex. He is considering building a recreational area and wants to know if a playground area or an arcade would be better to build. He gathered the ages of the children and now needs help in displaying them. The approximate ages in years of the 20 children in the building are 13, 1, 5, 8, 7, 1, 0, 12, 10, 9, 1, 5, 5, 13, 6, 8, 16, 2, 3, 0. He wants to understand the results he collected, but doesn't want to spend time creating bar or circle graphs. He is sure a line graph would not work. You suggest that he create a line plot and help him do so.

Sort your data.

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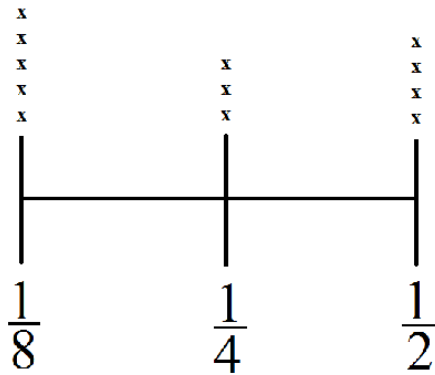
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Title: \_\_\_\_\_

**Unit 8, Activity 12, The Plot Thickens, Creating Line Plots**

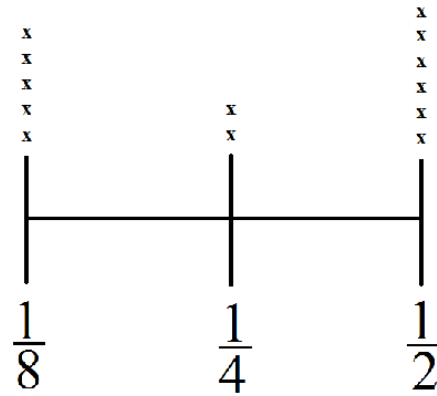
Second Story: Cullen, the citrus seller, heard from Mr. Johnston that you are very good with creating line plots. He had created two line plots showing his inventory in the store after his latest Bag of Fruit sale. He is not sure which one is correct. He asks you to analyze his data, look at the graphs, and tell him which one is correct. His data showed three  $\frac{1}{8}$  lb. bags, four  $\frac{1}{2}$  lb. bags, and five  $\frac{1}{4}$  lb. bags.



Bags of Fruit by weight in pounds

**A**

Correct? \_\_\_\_\_



Bags of Fruit by weight in pounds

**B**

Correct? \_\_\_\_\_

1. Help Cullen find out how many bags of fruit he sold altogether. He started with 10 bags.

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2. Help Cullen find the total amount of fruit in pounds for the  $\frac{1}{8}$  pound bags that are left.

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3. Are there at least 2 pounds of fruit left in the  $\frac{1}{2}$  pound bags of fruit? Help Cullen find out.

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4. Find out if there is less than 1 pound left in the  $\frac{1}{4}$  pound bags. If so, you can take them home.

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**Unit 8, Activity 12, The Plot Thickens, Creating Line Plots with Answers**

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

**The Plot Thickens, Creating Line Plots**

Directions: You are an active character in these stories! Use what you know about creating line plots to create line plots needed to continue the story. Complete all your work in the time given and listen carefully to see how the story ends.

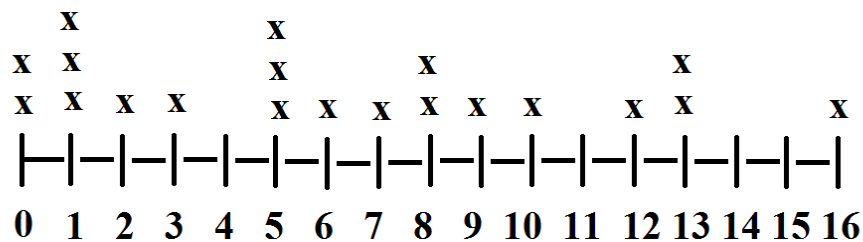
**First Story:** Mr. Johnston owns a small apartment complex. He would like to know the ages of the children in the building. The ages in years of the 20 children in the building are 13, 1, 5, 8, 7, 1, 0, 12, 10, 9, 1, 5, 5, 13, 6, 8, 16, 2, 3, 0. He wants to understand the results he collected but does not want to spend time creating bar or circle graphs. He is sure a line graph will not work. You suggested he create a line plot and helped him do so.

Sort your data.

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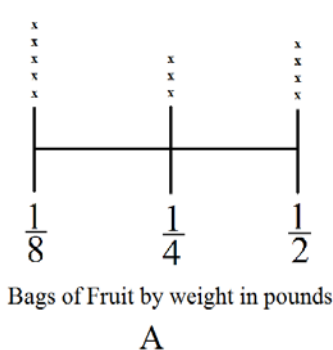
0, 0, 1, 1, 1, 2, 3, 5, 5, 5, 6, 7, 8, 8, 9, 10, 12, 13, 13, and 16

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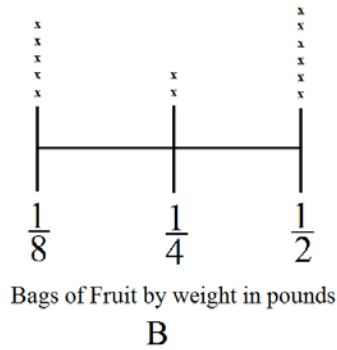


**Ages of Children in Mr. Johnston's Apartment Complex**

**Second Story:** Cullen, the citrus seller, heard from Mr. Johnston that you were very good with creating line plots. He created two line plots showing inventory on display in his store after his latest Bag of Fruit sale. He was not sure which one was correct. He asked you to analyze his data, look at the graphs, and tell him which one was correct. His data showed three  $\frac{1}{4}$  lb. bag, four  $\frac{1}{2}$  lb. bag, and five  $\frac{1}{8}$  lb. bag.



Correct? Yes



Correct? No

***Unit 8, Activity 12, The Plot Thickens, Creating Line Plots with Answers***

1. Help Cullen find out how many bags of fruit he sold altogether (*12 bags*).
2. Help Cullen find the total amount of fruit in pounds for the  $\frac{1}{8}$  pound bags that are left ( *$\frac{5}{8}$  pound*).
3. Are there at least 2 pounds of fruit left in the  $\frac{1}{2}$  pound bags of fruit? Help Cullen find out. (*Yes, there are 2 pound of fruit.*)
4. Find out if there is less than 1 pound left in the  $\frac{1}{4}$  pound bags. If so, you can take them home. (*There is  $\frac{3}{4}$  of a pound left, so you get to take those bags home.*)