

## Jordan School District

Name:	Date:	
<p>1. Math Fact Find the answer to the problem below. Explain your thinking strategy. Find the product of <math>32 \times 6</math>.</p>	2. Your definition numeral	Facts/characteristics
	Example	Non-example
<p>3. Number Sense Write three hundred six thousand and four tenths as a numeral.</p>	<p>4. Measurement How many ounces are in one cup? How many ounces are in three cups? How many ounces are in one and one half cups?  How many cups are in one pint? How many cups are in four pints? How many cups are in three and one half pints?</p>	
<p>5. Word Problem Students use many different strategies when adding single or double digit numbers. Here are a few strategies for you to think about: counting up, making a ten, and near doubles. Look at the problem below, then answer the questions.</p> <div style="text-align: center; margin: 10px 0;"> <math display="block">\begin{array}{r} 28 \\ + 36 \\ \hline 50 \\ + 14 \\ \hline 64 \end{array}</math> </div> <p>Is the student's answer correct? How did the student get the answer? Write what you think about the student's solution and strategy.</p>	<p>6. Picture Students in our school may attend an after school chess class. The ages of the students participating are 11, 12, 12, 10, 9, 11, 10, 10, and 9. Identify and draw a graph that would best compare the ages of the students.</p>	

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Name:	Date:	
<p>1. Math Fact Find the answer to the problem below. Explain your thinking strategy.</p> <p style="text-align: center;"><math>\\$3.50 + \\$1.75 + \\$4.49 = \underline{\hspace{2cm}}</math></p>	2. Your definition expanded form	Facts/characteristics
	Example	Non-example
<p>3. Number Sense</p> <p style="text-align: center;">Write 876,492 in expanded form</p>	<p>4. Measurement</p> <p>How many pints are in one quart? How many pints are in four quarts? How many pints are in two and one half quarts?</p> <p>How many quarts are in one gallon? How many quarts are in three gallons? How many quarts are in four and one half gallons?</p>	
<p>5. Word Problem</p> <p>Luke and nine friends ran to his house for a piece of pizza. There were only four pieces left. How should Luke divide the pizza to make sure he and all of his friends get an equal share? Estimate: What are your solutions and strategies?</p>	<p>6. Picture</p> <p>Many students in Mr. Hansen's class play musical instruments. Five students play the violin, six students play the piano and three students play both instruments. Draw and show this information using a Venn diagram.</p>	

## Jordan School District

Name:	Date:	
<p>1. Math Fact</p> <p>Find the answer to the problem below. Explain your thinking strategy. What is the product of <math>10 \times 18</math>?</p>	2. Your definition exponent	Facts/characteristics
	Example	Non-example
<p>3. Number Sense</p> <p style="text-align: center;">Write <math>10^2</math> or <math>10^2</math> another way and solve.</p>	<p>4. Measurement</p> <p>How many ounces are in one pint? How many ounces are in two pints? How many ounces are in one and one half pints?</p> <p>How many ounces are in one quart? How many ounces are in four quarts? How many ounces are in three and one half quarts?</p>	
<p>5. Word Problem</p> <p>You want a hard boiled egg for breakfast. The egg must cook for five minutes, but you have a two minute and a nine minute sand timer. Using these tools, how can you time the egg for five minutes while it cooks? Explain your solutions and strategies.</p>	<p>6. Picture</p> <p>Construct a four quadrant graph. Draw the points on the graph for these ordered pairs: <math>(-3, 4)</math>, <math>(5, -2)</math>, <math>(-3, -4)</math>, <math>(3, 2)</math>.</p>	

## Jordan School District

Name:	Date:	
<p>1. Math Fact</p> <p>Find the answer to the problem below. Explain your thinking strategy. What is the product of <math>13 \times 6</math>?</p>	2. Your definition whole numbers	Facts/characteristics
	Example	Non-example
<p>3. Number Sense</p> <p style="text-align: center;">Write the multiplication problem another way.  <math>2 \times 2 \times 2 =</math></p>	<p>4. Measurement</p> <p>How many ounces are in one gallon? How many ounces are in two gallons? How many ounces are in two and one half gallons?</p> <p>How many pints are in one gallon? How many pints are in four gallons? How many pints are in two and three fourths gallons?</p>	
<p>5. Word Problem</p> <p>Mike and his mother are making chocolate chip cookies. Their recipe needs three fourths cup of brown sugar. They want to triple the recipe. They have two cups of brown sugar. Is there enough brown sugar to triple the recipe? Guess: What solutions and strategies did you use to solve this problem?</p>	<p>6. Picture</p> <p>Draw a graphic organizer to compare ounces to cups, cups to pints, pints to quarts and quarts to gallons.</p>	

## Jordan School District

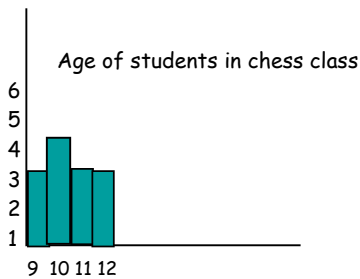
Friday Exploration - Select a game from the appendix to teach students. Allow time to play the game. After playing the game, have students discuss the mathematics used during the game.

### Week One

### Answer Key

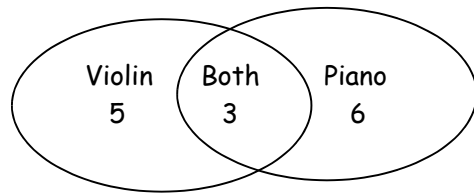
#### Day 1

1.  $192$ ;  $30 \times 6 = 180$ ,  $2 \times 6 = 12$  and  $180 + 12 = 192$
2. A symbol for a number, 23, 486
3. 306,004
- 4.
5. Correct
- 6.



#### Day 2

1. 9.74
2. A way of writing a number that shows its place value.  $346 = 300 + 40 + 6$  or  $3 \times 10^2 + 4 \times 10^1 + 6$
3. See # 2 for example
- 4.
5. See Teacher note below
6. Venn Diagram



#### Day 3

1. 10
2. Tells how many times to multiply a number by itself.  $3^4$  means three to the fourth power. Three is the base, four is the exponent.  $3^4 = 3 \times 3 \times 3 \times 3$
3.  $10^2$  can also be written as  $10 \times 10 = 100$
- 4.
5. Answers may vary.
6. Check picture for accuracy.

#### Day 4

1. 78
2. The numbers we count with starting with zero. 0,1,2,3,4,5, etc.
- 3.
- 4.
- 5.
- 6.

#### Teacher Information:

- < There is a space left for students to make an estimation or a guess on many of the word problems. The space is deliberate, please encourage students to estimate before computing.
- <  $10^3$  is another way to write ten to the third power. It is important for students to learn about the "carat" ^ because it is also used on calculators.
- < Alps teachers have many teaching lessons available on the T4 web site at Jordan School District. Go to the math link, and lessons are organized according to the math content being taught.

#### Teacher Notes:

- < Student often will divide the small number into the large number. This concept is difficult for students to grasp, but they are not dividing students, but rather the pizza. It may help with this problem for students to try to draw a solution.





## Jordan School District

Name:	Date:	
<p>1. Math Fact</p> <p>Find the answer to the problem below. Explain your thinking strategy. What is the product of <math>14 \times 12</math>?</p>	2. Your definition standard form	Facts/characteristics
	Example	Non-example
<p>3. Number Sense</p> <p style="text-align: center;">Change <math>5^3</math> to standard form.</p> <p style="text-align: center;">Change 16 into an exponent.</p>	<p>4. Measurement</p> <p>List as many things as you can that will hold about two quarts.</p>	
<p>5. Word Problem</p> <p>Rhonda brought a five quart container of ice cream for her class party. Each child had a one cup serving. Rhonda served the first ten people in line. How many servings were left? Estimate: What are your solutions and strategies?</p>	<p>6. Picture</p> <p>Draw and label a pyramid.</p>	

## Jordan School District

Name:	Date:	
<p>1. Math Fact</p> <p>Find the answer to the problem below. Explain your thinking strategy. What is the product of <math>16 \times 8</math>?</p>	2. Your definition scientific notation	Facts/characteristics
	Example	Non-example
<p>3. Number Sense</p> <p style="text-align: center;">Write 3,456 in scientific notation.</p>	<p>4. Measurement</p> <p>List as many things as you can that will hold about one gallon?</p>	
<p>5. Word Problem</p> <p>Juan's dad paid \$38.22 for a tank of gas. It was \$1.82 per gallon. How many gallons did he get? Estimate:                      What strategies did you use to solve the problem?</p>	<p>6. Picture</p> <p>Draw a rectangular prism. Label the faces, vertices, and edges.</p>	

## Jordan School District

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Week Two

Answer Key

Day 6

- 1.
2. A number with exactly 2 factors, 1 and itself; 17, 23, 29
- 3.
- 4.
- 5.
- 6.

Day 7

- 1.
2. A number with more than two factors; 12, 18, 24...
- 3.
- 4.
- 5.
- 6.

Day 8

- 1.
2. The usual way to write a number using the numerals zero to nine.
- 3.
- 4.
- 5.
- 6.

Day 9

- 1.
2. A number written as the product of a number from 1-10 and a power of ten;  $3,421 = 3.421 \times 10^3$
- 3.
- 4.
- 5.
- 6.

Teacher Information:

Teacher Notes:

## Jordan School District

Name:	Date:	
1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is the product of $11 \times 13$ ?	2. factors	
3. Number Sense Is the following equation true or false? Prove it! $15 + 7 - 4 + 1 - 4 + 6 - 21 = 0$	4. Measurement List as many things as you can that will hold about one pint?	
5. Word Problem Rachel is mowing lawns during the summer. She will make \$15.00 per lawn. How many lawns will she have to mow to purchase a bike that costs \$310.00 with the taxes included? Estimate: What strategies did you use to solve the problem?	6. Picture Draw a line segment. Label the midpoint on the line segment.	

## Jordan School District

Name:		Date:	
<b>1. Math Fact</b> Find the answer to the problem below. Explain your thinking strategy. What is the product of $8 \times 12$ ?		<b>2. prime factorization</b>	
<b>3. Number Sense</b> Determine the prime factorization for 46 and 56.		<b>4. Measurement</b> How many liters are in one gallon?	
<b>5. Word Problem</b> Using the number in the box on the left, follow the rule to fill in the number on the right. When might you use a number table such as the one below? What strategies did you use to fill in the tables?		<b>6. Picture</b> Draw a factor tree for the numeral 39.	
Rule: $n \times 3 - 2$		Rule: $n \times 2 + 4$	
2		3	
4		5	
6		7	
8		9	

## Jordan School District

Name:	Date:	
<p>1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is the product of <math>12 \times 12</math>?</p>	<p>2. greatest common factor</p>	
<p>3. Number Sense <math>2^3 \times 3 \times 5</math> are prime factors for what number?</p>	<p>4. Measurement Measure your pencil to the nearest one fourth of an inch. Measure it to the nearest one sixteenth of an inch.</p>	
<p>5. Word Problem Your teacher placed this problem on the board.</p> <div style="text-align: center; margin: 10px 0;"> <math display="block">\begin{array}{r} \underline{\hspace{1cm}} \\ 24 \ ) \ 230 \end{array}</math> </div> <p>Solve the division and then write a word problem that fits this mathematic situation. Estimate: What strategies did you use to solve the problem?</p>	<p>6. Picture Randi's allowance is \$5.00 per week. This week she spent \$1.25 on candy, \$1.25 on a notebook, and \$2.50 on fast food. Draw a circle graph showing how Randi spent her allowance.</p>	

## Jordan School District

Name:	Date:	
1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is $50 - 15$ ?	2. least common multiple	
3. Number Sense Find the greatest common factor and the least common multiple for four and ten.	4. Measurement How long is your math (or other) textbook? Measure to the nearest one sixteenth of an inch.	
5. Word Problem The numbers are $12 \times 36$ . Write a story problem using these numerals.	6. Picture Draw a four quadrant graph. Place a right triangle in one of the quadrants. Rotate and draw the right triangle in each of the quadrants.	



## Jordan School District

Name:		Date:	
1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is $999 - 100$ ?	2. rational number		
3. Number Sense  Put these numbers in order. $1, 1.7, 2, 1.3, \frac{3}{4}, 1\frac{1}{2}$	4. Measurement Measure your foot to the nearest sixteenth of an inch.		
5. Word Problem Jed was shopping with his mother. She asked Jed which was the best buy, the two pound box of crackers costing \$2.29, or the one pound box of crackers costing \$1.35. What should Jed tell his mother? <i>Guess?</i> <i>Prove It!</i>	6. Picture Draw a one inch line and divide it into sixteen equal parts. What is the advantage of using a ruler that has been marked into sixteen equal parts?		

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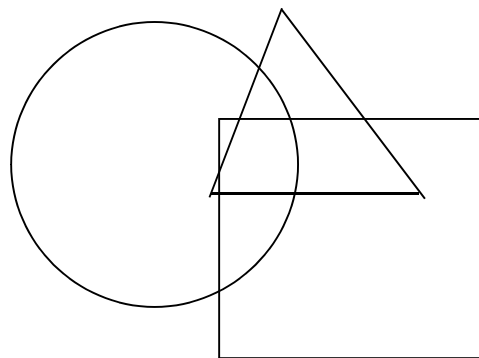
Name:	Date:	
1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is $25.6 + 14.2$ ?	2. dividend	
3. Number Sense  What is $10^0$ ? Prove it!	4. Measurement Find five things in your classroom that measure exactly one centimeter.	
5. Word Problem Number magic puzzles are fun. Try this one. , Choose a numeral , Multiply it by two , Add six , Divide in half , Subtract by three , Write your answer Choose a new numeral and try this magic puzzle again. Create your own magic puzzle!	6. Picture Survey five friends, ask each if they have a pet. Draw a graph and show the results of your survey.	

## Jordan School District

Name:		Date:	
1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is $65.4 \div 24.4$ ?	2. divisor		
3. Number Sense Label the parts to this division problem. Write a word problem to match the division problem. $\begin{array}{r} \overline{) 12} \\ 4 \end{array}$	4. Measurement Measure your height to the nearest sixteenth of an inch and to the nearest millimeter.		
5. Word Problem Your teacher assigned your group a literature book to read. The book is 1,344 pages long and must be read in 3 weeks. How many pages should you read each day? Estimate: Find more than one way to solve this problem and share your solutions and strategies.	6. Picture Make a convincing sketch showing how you solved the word problem in number five.		

# Jordan School District

Name:		Date:	
1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is $51.2 + 2.6$ ?	2. rules of divisibility		
3. Number Sense Is the numeral eight hundred twenty one divisible by two? Is six hundred seventy four divisible by five? Is four hundred fifty three divisible by three?	4. Measurement What is the difference between a yardstick and a meter stick?		
5. Word Problem Write the divisibility rules and show an example for each rule.	6. Picture Use numbers from one to twelve. Place odd numbers in the triangle; even numbers in the circle; and numbers divisible by three in the square.		



## Jordan School District

Friday Exploration - Select a game from the appendix to teach students. Allow time to play the game. After playing the game, have students discuss the mathematics used during the game.

Week Four

Answer Key

Day 16

- 1.
2. Any number that can be written in a fraction form (a/b) where  $b \neq 0$ ;  $3/4$ ,  $8/7$ ,  $7/1$ ,  $24/2$
- 3.
- 4.
- 5.
- 6.

Day 17

- 1.
2. A number being divided by another;  $8 \overline{)24}$   
24 is the dividend.
- 3.
- 4.
- 5.
- 6.

Day 18

- 1.
2. A number that another number is being divided by;  $8 \overline{)24}$ . 8 is the divisor
- 3.
- 4.
- 5.
- 6.

Day 19

- 1.
2. A way of telling if a number is evenly divisible by 2, 3, 5, 6, 9, and 10; student will give examples
- 3.
- 4.
- 5.
- 6.

Teacher Information:

Teacher Notes:

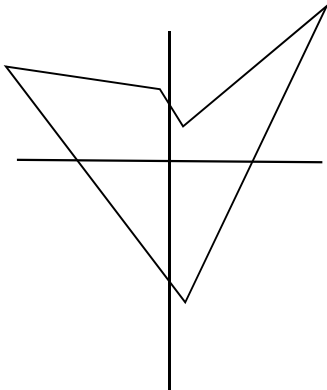
## Jordan School District

Name:	Date:									
<p>1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is <math>25.7 + 13.2</math>?</p>	2. expression									
<p>3. Number Sense Look at the table and identify the pattern</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px 5px;">Input</th> <th style="padding: 2px 5px;">Output</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">4</td> <td style="padding: 2px 5px;">10</td> </tr> <tr> <td style="padding: 2px 5px;">6</td> <td style="padding: 2px 5px;">12</td> </tr> <tr> <td style="padding: 2px 5px;">8</td> <td style="padding: 2px 5px;">14</td> </tr> </tbody> </table> <p>What will the output be when the input is fourteen? What is an algebraic expression to explain the pattern used above?</p>	Input	Output	4	10	6	12	8	14	<p>4. Measurement What metric unit of measurement would you use to measure the length of a dollar bill? The length of your bedroom? The distance from your house to the school?</p>	
Input	Output									
4	10									
6	12									
8	14									
<p>5. Word Problem When considering numerals from one to one hundred, which are prime numbers? Describe the solutions and strategies you used to answer this question.</p>	<p>6. Picture Draw a rectangular prism.</p>									

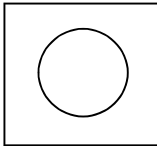
## Jordan School District

Name:		Date:	
1. Math Fact Find the answer to the problem below. Explain your thinking strategy. What is ten dollars and forty two cents and two dollars and forty four cents?	2. equation		
3. Number Sense Which is an equation?  $2 + 4 = 5 + 1$ or $2 + 4 = 6$  Explain why you selected that answer.	4. Measurement Measure around your wrist. Can you calculate the diameter and radius from this measurement? If so, what is it?		
5. Word Problem Find a graph or a table in your math book. Analyze the patterns on the graph or table. Write a prediction about how the patterns will continue.	6. Picture Using data you collect (or from your book), draw two graphs. Use a different scale for each graph.		

## Jordan School District

Name:	Date:	
<p>1. Math Fact</p> <p>Find the answer to the problem below. Explain your thinking strategy. What is eight and forty seven hundredths subtract four and twenty three hundredths?</p>	2. order of operations	
<p>3. Number Sense</p> <p>Solve and show your work. Explain what you did with the decimal in the problem.</p> <div style="text-align: center; margin-top: 20px;"> <math display="block">\begin{array}{r} 352 \\ \times .4 \\ \hline \end{array}</math> </div>	<p>4. Measurement</p> <p>The school bus is scheduled to arrive at the Clark Planetarium at 9:00 A.M. Teachers have scheduled three and one half hours in the Planetarium, one half hour to get to the park for lunch, one half hour to eat lunch, and one half hour to get back to school. What time will the bus arrive at the school?</p>	
<p>5. Word Problem</p> <p>Draw and use the picture from number six. Write directions for a friend that will help them draw the same geometric shape. Hint: You may want to use ordered pairs and the coordinate graph lines.</p>	<p>6. Picture</p> <p>Draw a simple geometric shape on graph paper. In the center of the shape, draw four coordinate graph lines. Example:</p> <div style="text-align: center; margin-top: 20px;">  </div>	

## Jordan School District

Name:	Date:	
<p>1. Math Fact</p> <p>Find the answer to the problem below. Explain your thinking strategy. What is two hundred forty three and twenty six?</p>	2. function	
<p>3. Number Sense</p> <p>Simplify each side of the equation and then write <math>&lt;</math>, <math>&gt;</math>, or <math>=</math> in the circle.</p> <p style="text-align: center;"> <math>(13 - 8) \times 10</math>    <input type="radio"/>    <math>100 - 49</math> </p>	<p>4. Measurement</p> <p>If a dollar bill is six inches long, how many dollars would you have to place end to end to reach from one side of your desk to the other?</p>	
<p>5. Word Problem</p> <p>A circle has been cut out of the center of a square of wood. What is the area of the remaining wood if the diameter of the circle is 3 cm? Estimate: Find more than one way to solve this problem and share your solutions and strategies.</p> <div style="text-align: center; margin: 10px 0;">  <p>5 cm</p> </div>	<p>6. Picture</p> <p>Draw a circle with a radius of 5 centimeters.</p>	

## Jordan School District

Friday Exploration - Select a game from the appendix to teach students. Allow time to play the game. After playing the game, have students discuss the mathematics used during the game.

Week Five

Answer Key

Day 21

1. 38.9; one strategy is to add tens, ones, and then tenths - then add the sums together.
2. A mathematical phrase containing variables, constants and operation symbol;  $x + 5 + y + 2$
3.  $14 \mid 20$ ;  $x + 6$
4. cm, mm; dm, m; km, m
5. 2,3,5,7,11,13,17,19,23,29,31,37,41,43,47,53,59,61,67,71,73,79,83,89,97; strategies will vary, but might include rules of divisibility, division of large numbers by prime numbers, etc.
6. Drawings will vary

Day 22

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Day 23

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Day 24

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Teacher Information:

Teacher Notes: