Topic 1 – Review
Multiplication and Division: Meanings and Facts

Mathematician_____

1.1 – I can recognize multiplication as repeated addition of equal groups used in in arrays and comparisons.

Vocabulary

1. In the space below, draw an **array** to show 2 x 3 = 6.

2. What are the **factors** in the number sentence 3 x 6 = 18?

_____

3. What is the **product** in the number sentence 5 x 8 = 40?

_____

Write an addition sentence and a multiplication sentence for each array below.

4.   * * * *

   * * * *

   * * * *

   * * * *

Addition Sentence_____

Multiplication Sentence_____

5. ☺ ☺ ☺ ☺ ☺ ☺

   ☺ ☺ ☺ ☺ ☺ ☺

Addition Sentence_____

Multiplication Sentence_____

6. Write a multiplication sentence for the following addition sentence.

6 + 6 + 6 + 6 + 6+ 6 = 36

_____

1.2 – I can use patterns to find products with factors of 2, 5, and 9.

Vocabulary

7.   List the next 3 **multiples** of 4.   4, 8, 12, 16, _____,_____,_____

Fill in the missing numbers.

8.   9 x _____ = 36.

9.   _____ x 2 = 14

10.   5 x 8 = _____

1.3 – I can use multiplication properties to solve multiplication problems.

Vocabulary

14.   The **Commutative Property of Multiplication** says that when you multiply 2 numbers, they can be in any order.   Because of this property, 3 x 6 = ____x 3.

15.   The **Identity Property of Multiplication** says that when you multiply any number by 1, the product is that number. Because of this property, 6 x 1 = _____.

16.   The **Zero Property of Multiplication** says that when you multiply any number by 0, the product is also 0.   Because of this property, 8 x 0 = _____.

Fill in the missing numbers and answer the following questions.

11.   Which property can help you find the missing number?

8 x _____ = 0

_____

12. Which property can help you find the missing number?

5 x _____ = 5

_____

13. Mrs. Heinz-Betts has 6 boxes with 8 crayons in each box, and Mrs. Cronin has 8 boxes with 6 crayons in each box. Who has more crayons? _____
Which property can help you find the answer?

_____

1.4 – I can use the Distributive Property to solve multiplication problems by breaking them apart.

Vocabulary

14. We can use the **Distributive Property** to break apart problems into two simpler problems. For example, you can break down 7x 6 can be broken down to (7x 2) + (7x 4).

How can you break down 8 x 4? (8 x 3) + (8 x _____) = _____

Fill in the missing numbers.

10. 9 x 5 = (5 x 5) + (_____ x 5) = _____

11. 8 x 4 = (_____ x 4) + (2 x 4) = _____

12. 3 x 11 = (3 x _____) + (3 x 3) = _____

1.5 – I can recognize patterns and continue those patterns.

Look for a pattern. Use the pattern to find the missing numbers.

13. 9, 18, 27, _____, _____, _____, _____, _____

14. 60 + 8 = 68

600 + 80 = 680

6,000 + 800 = _____

60,000 +8,000 = _____

15. Leah has a newspaper route. The first four houses she delivers to are numbered 318, 324, 330, and 336. If this pattern continues, what will the next four numbers be? _____,_____,_____,_____

1.6 – I can use and draw models to solve division problems.

Draw pictures to help you divide and solve the problems.

16. Ethan planted 30 plants into 5 rows? How many plants were in each row?

_____

17. Grace arranged 15 chairs into 3 equal groups. How many chairs were in each group?

_____

18. Logan put 24 baseball cards into 4 boxes. How many baseball cards were in each box?

_____

1.7- I can use arrays to write and complete multiplication and division fact families.

Vocabulary

19. Operations that undo each other are **inverse operations.** What is the inverse operation of 5 x 3 = 15.

_____

20. A **fact family** shows all the related facts for a set of numbers. Write a fact family for the numbers 3, 8, and 24.

_____

_____

21. Write a fact family for the numbers 5, 8, and 40.

_____

_____

1.8 – I can use multiplication facts with 0 and 1 to learn about special division rules with 0 and 1.

Use multiplication facts to help you divide.

22. $9 \div 9 =$ _____

23. $7 \div 1 =$ _____

24. $8 \div 0 =$ _____

Use >, <, or =to complete the problem.

25. $0 \div 5$ _____$5 \div 5$

1.9 – I can use multiplication facts related to division facts in order to solve division problems.

Use multiplication facts to help you divide.

26. $81 \div 9 =$ _____

27. $56 \div 7 =$ _____

28. $48 \div 6 =$ _____

1.10 – I can draw pictures to problem solve multiplication situations and use their pictures to write number sentences.

Draw pictures to help you solve the problems.

29. Krista collects pennies and dimes. She has 8 pennies and twice as many dimes.

a. How many dimes does she have? _____

b. How many coins does Krista have in all? _____

30. Mrs. Heinz-Betts used a recipe for apple and raisin muffins. Her recipe called for three times as many apples as raisins. If Mrs. Heinz-Betts uses 2 cups of raisins, how many cups of apples will she use?

_____

31. Jon is 9 years old. His grandfather is 6 times as old as he is. How old is Jon's grandfather?

_____

32. Jack built a rectangular pen for his dog. The length is two feet longer than the width. The width is 5 feet. Write an equation to find the perimeter. What is the perimeter of the pen.

_____