

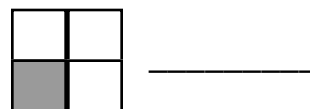
Third Grade Essential Standards

1. Identify symbols, words, or models for proper fractions.

- *Student Friendly Learning Objective - " I can name fractions shown by words, symbols, and models."*

a. Circle one third. a. $\frac{1}{3}$ b. $\frac{3}{1}$ c. $\frac{1}{30}$

b. Write the fraction that represents the shaded area. _____



2. Use proper fractions in contextual situations.

- *Student Friendly Learning Objective- " I can use fractions in real life"*

a. Mike rode his bike $\frac{3}{4}$ of a mile.
How much does he need to ride to complete a whole mile? _____

b. If Mary ate $\frac{1}{3}$ of her carrots. How many carrots would be left? _____



3. State multiplication and division facts through 9.

- *Student Friendly Learning Objective- " I can say and write my multiplication facts through the 9's"*

a. $5 \times 4 =$ _____ b. $3 \overline{)15}$ _____

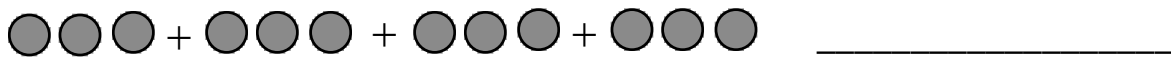
4. Demonstrate process of multiplication as repeatedly adding the same number, counting by **multiples**, combining equal sets, and making **arrays**.

- *Student Friendly Learning Objective- " I can show multiplication using repeated addition, counting by multiples, combining equal sets, and making arrays."*

a. Write the following multiplication problem as repeated addition.

$9 \times 3 = 27$ _____

b. What multiplication problem does the following drawing represent?



5. Demonstrate process of division with one-digit divisors.

- *Student Friendly Learning Objective- " I can show the process of division using repeated subtraction, breaking a whole group into smaller sets, and sharing equally."*

Write the following division problem as repeated subtraction.

a. $4 \overline{)24}^6$ _____

b. Jake, Jordan, and Nick shared a pizza with 12 slices.

How many slices of pizza did each person get? _____

6. Demonstrate families of **equations** for multiplication and division through 9's.

- *Student Friendly Learning Objective- " I can identify fact families for multiplication and division."*

Example: $5 \times 3 = 15$, $3 \times 5 = 15$, $15 \div 3 = 5$, $15 \div 5 = 3$

Give the other equations in each family.

a. $8 \times 2 = 16$ _____

b. $9 \times 5 = 45$ _____

7. Identify whole number **factors**.

- *Student Friendly Learning Objective- " I can name the factors for a given number through 24."*

Example. 18- 1,2,3,6,9,18

List the factors.

a. 12 - _____

b. 8 - _____

8. Name the possible outcomes for a probability experiment.

- *Student Friendly Learning Objective- " I can name the possible outcomes in a probability experiment."*

a. If you flip a coin what are the possible outcomes?

b. If you roll a six sided die what are the possible outcomes?

9. Make a diagram to represent the number of combinations available when 1 item is selected from each of 3 sets of 2 items.

- *Student Friendly Learning Objective- " I can make a picture or diagram to show how many combinations."*

a. If you have 2 shirts, 2 pairs of pants, and 2 hats how many possible outfit combinations do you have? Draw a diagram.

b. If you have 1 type of bread, 2 types of cheese, and 3 types of meat how many possible sandwich combinations do you have? Draw a diagram.

10. Communicate a grade level appropriate **iterative** pattern using symbols or numbers.

- *Student Friendly Learning Objective- " I can identify the rule in a pattern."*

Describe the pattern

a. 3, 6, 3, 6 _____

b. 50, 60, 70, 80 _____

11. Solve grade level appropriate pattern problems.

- *Student Friendly Learning Objective- " I can extend a pattern using symbols or numbers."*

What comes next in each pattern?

a. 5, 15, 25, 35, _____, _____, _____

b. 10, 8, 6, _____, _____, _____

12. Solve **equations** with one **variable**.

- *Student Friendly Learning Objective- " I can find the variable in an equation."*

a. $__ + 9 = 16$

b. $15 - __ = 11$

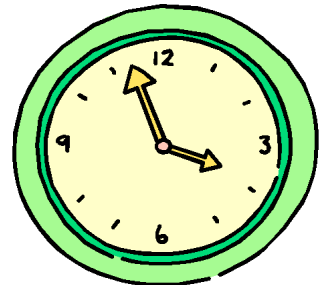
13. Recognize similar shapes.

- *Student Friendly Learning Objective- " I can find similar shapes."*

a. The drum is the shape of a _____



b. The clock is the shape of a _____



Additional Third Grade Standards

14. Make models that represent proper fractions.

Halves, thirds, fourths, eighths and tenths.

a. Color $\frac{5}{8}$ of the circles. _____ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

b. Color $\frac{2}{10}$ of the rectangles. _____ □ □ □ □ □ □ □ □ □ □

15. Compare two proper fractions with like denominators.

Compare using $>$ $<$ or $=$

a. $\frac{1}{4}$ _____ $\frac{2}{4}$ b. $\frac{3}{5}$ _____ $\frac{2}{5}$ c. $\frac{5}{8}$ _____ $\frac{1}{8}$

16. Order three or more proper fractions with like denominators.

Put in order from least to greatest.

a. $\frac{2}{10}$ $\frac{8}{10}$ $\frac{5}{10}$ _____ _____ _____

b. $\frac{5}{6}$ $\frac{2}{6}$ $\frac{4}{6}$ _____ _____ _____

17. Demonstrate the commutative and identity properties of multiplication.

Commutative property: $8 \times 2 = 2 \times 8$

Identity property: $6 \times 1 = 6$ and $1 \times 6 = 6$

Name the property.

a. $9 \times 1 = 9$ _____

b. $5 \times 6 = 6 \times 5$ _____

18. Identify multiplication and division as inverse operations.

Example: $12 \times 3 = 36$ $36 \div 12 = 3$

Write the inverse operation.

a. $7 \times 2 = 14$ _____

b. $5 \times 4 = 20$ _____

19. Make predictions about the probability of events being more likely, less likely, equally likely or unlikely.

a. Landing on heads or tails is _____ when flipping a coin.

b. When rolling a dice it is _____ that you will roll 1,2,3,4 or 5 than it is that you will roll a 6.

20. Record the data from a grade level appropriate probability experiment.

a. Flip a coin 10 times and record the results below.

Heads: _____ Tails: _____

b. Flip a coin 20 times and record the results below.

Heads: _____ Tails: _____

21. Compare the results of two repetitions of the same grade level appropriate probability experiment.

Flip a coin 5 times and record the results below.

Heads: _____ Tails: _____

Flip a coin 5 times and record the results below.

Heads: _____ Tails: _____

22. Use variables in contextual situations.

a. $4 - \underline{\quad} = 3$

Jan had 4 cookies, now she has 3. How many did she eat? _____

b. $5 \times \underline{\quad} = 20$

The cost of the roller coaster is \$5. Keith spent \$20 riding the roller coaster.

How many times did he ride? _____

23. Extend a grade level appropriate repetitive pattern.

Extend the pattern.

1. 5, 10, 15, 20, _____, _____, _____

2. 2, 4, 6, 8, _____, _____, _____

Benchmark 2 Essential Vocabulary

Array - an arrangement of rows and columns

Equation - a number sentence

Factor - a number that divides another number evenly

Iterative - a pattern that repeats itself

Multiples - the product of two numbers

Product - the result of multiplication

Variable - a symbol that represents a quantity

Answer Key

1. a. $\frac{1}{3}$ b. $\frac{1}{4}$

2. a. $\frac{1}{4}$ b. $\frac{2}{3}$

3. a. 20
b. 5

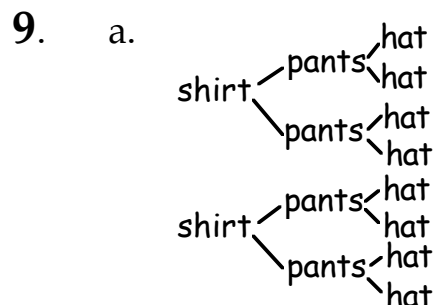
4. a. $9 + 9 + 9 = 27$
b. $3 \times 4 = 12$

5. a. $24 - 4 - 4 - 4 - 4 - 4 - 4 = 0$
b. 4

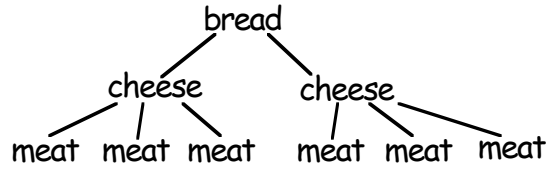
6. a. $2 \times 8 = 16$, $16 \div 8 = 2$, $16 \div 2 = 8$
b. $5 \times 9 = 45$, $45 \div 9 = 5$, $45 \div 5 = 9$

7. a. 1,2,3,4,6,12
b. 1,2,4,8

8. a. Heads or tails
b. 1, 2, 3, 4, 5 or 6



b.



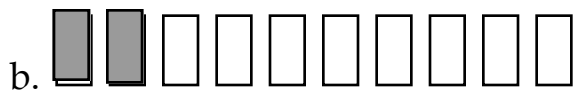
10. a. multiply by 2, divide by 2
b. add 10

11. a. 45, 55, 65
b. 4, 2, 0

12. a. 7
b. 4

13. a. cylinder
b. circle

14. a. ● ● ● ● ● ○ ○ ○



15. a. < b. > c. >

16. a. $\frac{2}{10}$ $\frac{5}{10}$ $\frac{8}{10}$
b. $\frac{2}{6}$ $\frac{4}{6}$ $\frac{5}{6}$

17. a. Identity Property
b. Commutative Property

18. a. $14 \div 7 = 2$
b. $20 \div 4 = 5$

19. a. equally likely
b. more likely

20. --

21. --

22. a. 1
b. 4