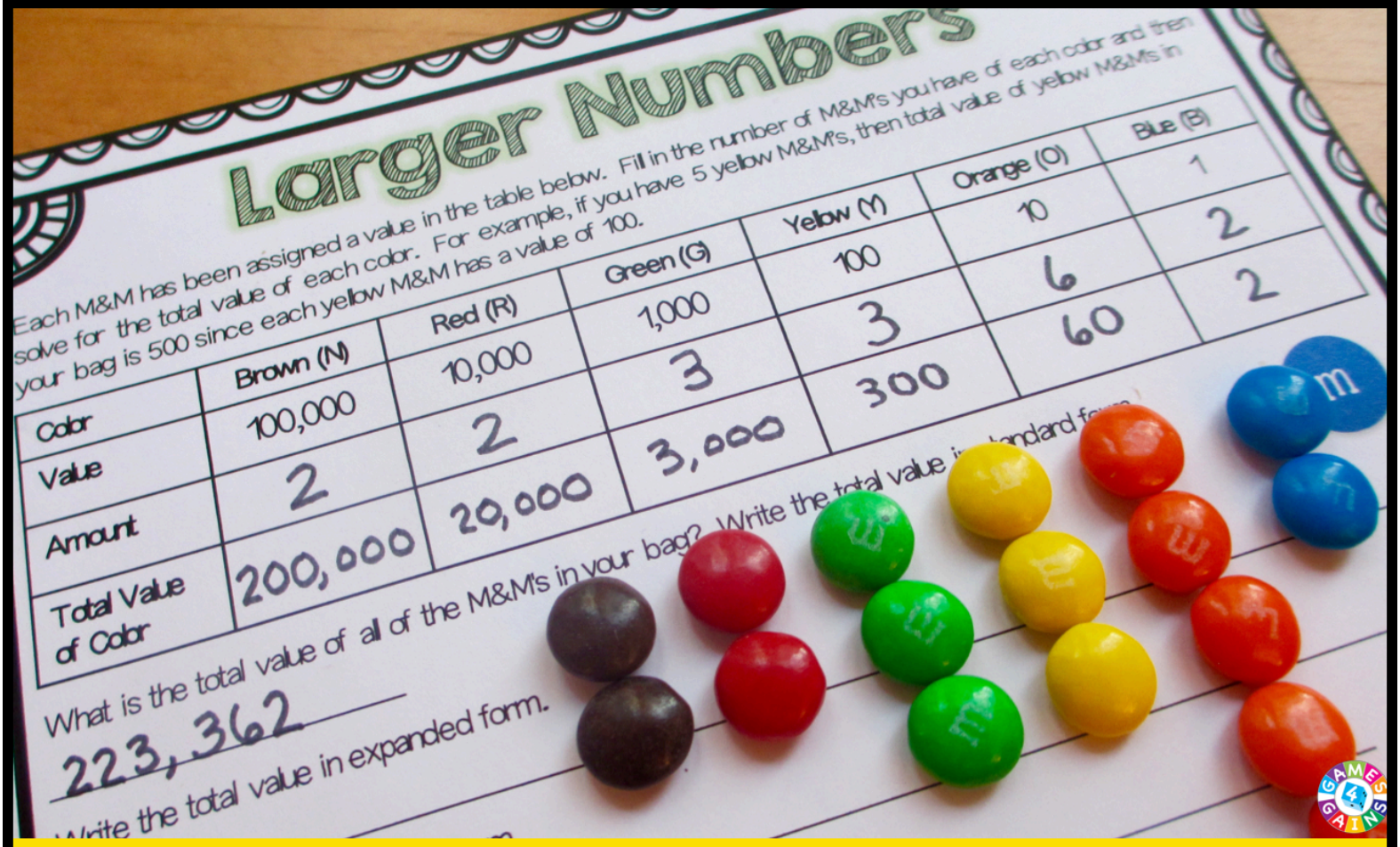
M&M MATH

For Upper Grades



Place Value, Numbers, & Operations

Instructions for the Teacher

Included in this packet:

- 20 full pages of math activities, each addressing a different skill:
  - Numbers Within 1,000 (Place Value)
  - Larger Numbers (Place Value)
  - Decimal Numbers (Place Value)
  - Number Sense – Up to 3 Digits
  - Number Sense – Larger Numbers
  - Number Sense – Decimals
  - One-Step Number Patterns with Addition and Subtraction
  - Two-Step Number Patterns with Addition, Subtraction, and Multiplication
  - Number Patterns with Decimal Addition and Subtraction
  - Addition and Subtraction Within Thousands
  - Addition and Subtraction Within Millions
  - Addition and Subtraction With Decimals
  - Multiplication Arrays
  - Multiplication Facts
  - Multiplication with Larger Numbers
  - Multiplication with Decimals
  - Order of Operations
  - Factors and Multiples
  - Multi-Step Word Problems
  - Math with Nutrition Facts

M&M's needed (READ CAREFULLY):

- 1 small bag of M&M's for each student or group of students; the bag MUST include:
  - No fewer than 2 and no more than 9 of EACH color of M&M (red, orange, yellow, green, blue, brown)

Using the activities:

1. Print one copy of the packet for each student (or print the specific pages you'd like each student to complete).
2. Give each student a bag of M&M's to use. Be sure that students know NOT to eat the M&M's until the activities are over.
3. Make sure to go over the directions on each page with the students.
4. Let each student have fun completing the activities!

Larger Numbe

Each M&M has been assigned a value in the table below. Fill in the number of
and then solve for the total value of each color. For example, if you have 5
yellow M&M's in your bag is 500 since each yellow M&M has a value of 100

Color	Brown (N)	Red (R)	Green (G)	Yello
Value	100,000	10,000	1,000	
Amount				
Total Value of Color				

What is the total value of all of the M&M's in your bac .

_____

Write the total value in expanded form.

_____

Write the total value in word form.

_____

What is 100 more than the total
What is 10,000 less than the to ? _____
What is 1,000 more than th bag? _____
What is 10 less than the ag? _____
What is 100,000 more in your bag? _____

Round the total
Round the tot _____
Round the _____
Round t _____
Roun thousand. _____

ue that is greater than you have. Write their name and total value in standard form below.

_____

a total value that is less than you have. Write their name and total value in expanded form below.

_____

Number Sense - Deci

Count how many of each color M&M you have and fill in the table below. Ther
color of M&M as "digits" in order to answer the following questions. For ea
each digit once.

Color	Red (R)	Orange (O)	Yellow (Y)	Gre
Amount				

1. Fill in each of the blanks with one digit in order to make

0 . _____ _

2. Fill in each of the blanks with one digit in order

0 . ___

3. What is the difference between your gr cimal number (#2) above?

_____

4. Fill in each of the blanks with on nber you can.

_____ _____ _____ .

5. Fill in each of the blanks number you can.

_____ _____ ___

6. What is the differ 4) and least number (#5) above?

_____

7. If you ma ch of the six digits only one time, what is the greatest possible s

. _____ = _____

8. using each of the six digits only one time, what is the greatest ecimal numbers?

_____ - 0. _____ = _____

numbers using each of the six digits only one time, what is the least possible bers?

_____ + 0. _____ = _____

Two-Step Number Patterns v
Addition, Subtraction, and Mult

Count how many of each color M&M you have and fill in the table below. The lette
number of M&M's you have of that particular color. For example, if you have 2
is R" should be read as "The starting number is 2." If you have 3 orange M&
be read as "35."

Color	Red (R)	Orange (O)	Yellow (Y)	G	)
Amount					

1. The pattern is add 9, subtract 4. The starting number is sequence?

   _____, _____, _____

2. The pattern is add 3, subtract 5. The starting n rs in the sequence?

   _____, _____, _____

3. The pattern is multiply by 2, subtract 6. st three numbers in the sequence? _____, _____

4. The pattern is multiply by 5, add e first three numbers in the sequence?

   _____, _____

5. The pattern is subtract What are the first four numbers in the sequence? _____ _____, _____

6. The pattern is YN. What are the first four numbers in the sequence?

   _____ _____, _____

7. The pa umber is ROR. What are the first three numbers in the sec _____, _____

8. starting number is Y. What are the first three numbers in the sequence?

   _____, _____

00. The starting number is GNY. What are the first four numbers in the

   _____, _____, _____, _____

Addition and Subtracti
Within Thousands

Count how many of each color M&M you have and fill in the table below. Th
represent the number of M&M's you have of that particular color. For ex
orange M&M's, and 5 green M&M's, then "R + O" should be read as "2 +
"452."

Color	Red (R)	Orange (O)	Yellow (Y)	G	)
Amount					

OB + G = _____

RR + Y = _____

NG + GR = _____

BN + YY = _____

BGY + YOR = _____

GRG + BOO = _____

G = _____

G – BR = _____

Choose on
and writ

Choose one of the subtraction equations above and write a word problem that requires you to use that equation to solve it.

Multiplication Arra

Use your M&M's to make an array using the information given in each box b
M&M's to make your arrays. Then, draw the array in the box and write th

3 rows of 6 M&M's

Equation: _____ x _____

_____ x _____ = _____

7 rows of 2

_____ = _____

4 rows of 4 M&M's

Equation: _____ x _____ = _____

CHALLENGE:

k of this paper, make as many arrays as you can using your M&M's.
How many can you make?

Multiplication with Larger N

Count how many of each color M&M you have and fill in the table below. Th
represent the number of M&M's you have of that particular color. For ex
orange M&M's, 6 blue M&M's, and 5 green M&M's, then "RB x GO" shou
should be read as "4,526."

Color	Red (R)	Orange (O)	Yellow (Y)	G	N)
Amount					

OY x R = _____

N x BB = _____

O x NB = _____

G x BY = _____

OYG x N = _____

Create six mor nd solve. Your equations must be different than the equ

1. _____

2. _____

4. _____ x _____ = _____

5. _____ x _____ = _____

6. _____ x _____ = _____

the products of the six multiplication equations you created. Write them in order from least to greatest.

_____

Order of Operati

Count how many of each color M&M you have and fill in the table below. Th
represent the number of M&M's you have of that particular color. For ex
orange M&M's, and 5 green M&M's, then "R x O" should be read as "2 x

Color	Red (R)	Orange (O)	Yellow (Y)	Gre
Amount				

(R + Y) x B = _____ N

(O x B) - N = _____ _____

Y + (G + R) = _____ _____

N + Y x O = _____ _____

B x Y - Y = _____ - R = _____

Use your M&M's t olution given below. You may use parentheses and

1. _____ 3. _____ = 32

2. _____ 4. _____ = 40

CHALLENGE:

uation that will give you a solution that is greater than 100. You bers. You must use the +, -, and x signs exactly one time each.

_____

Multi-Step Word Prob

Count how many of each colr M&M you have and fill in the table
problems using this information.

Colr	Red (R)	Orange (O)	Yellow (Y)	Gre
Amount				

1. What is the difference in total amount betwee ave the most of and the three M&M colors that you

2. If you doubled the number of blue M& blue M&M's would you have than yellow M&M's?

3. If someone gave you 9 more M&M's that you have, how many orange and brow

4. If you tripled the total nd then ate a dozen of your M&M's, how many

5. If your classm n you have and 2 times the number of red M&M's than ed M&M's does your classmate have in total?

6. If you Ms and blue M&M's that you have, how many mo u have than orange and yellow M&M's?

7 and brown M&M's that you have. Then, your teacher that you have. Then, you ate 5 more M&M's. How many aining?

CHALLENGE:
word problems similar to the ones above on the back of your paper.
Then, find a classmate to solve them.