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Math Magic Workbook™

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Based on the
Multimagic Table™: Brain-Ready Pattern-Based
Mathematical Learning System and Structured Visual
Framework



24

30	35	40	45	50	50	60	66	72	80	99	96	110
36	42	48	54	60	66	72	80	99	96	110		
42	49	56	63	70	77	80	99	96	110			
48	56	64	72	80	99	96	110					
54	63	72	81	90	96	110						
60	70	80	99	100	110							

Selina J. Jackson, M.A.

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Patterns make math visible. When math becomes visible, confidence follows.

Math
Magic
Workbook™

by

Selina J. Jackson, M.A.

Acknowledgements

Thanks to all of the educators that I have worked with over the years who helped to spark the ideas. Their experience, feedback, and professional knowledge were invaluable.

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Special Thanks to the late Dr. Kembleton Wiggins, Ph.D, Ed.D, my friend, colleague, and mentor. You know I could write a book about you, your brilliance, and your support alone. In the interest of time and space, I suffice it to say that I appreciate that you, recognize the gift, and thank you for continually encouraging me to pursue my dream. Without you, I would never have done it.

Thank you.

Table of Contents

Introduction for Teachers and Parents	vi
How to Use this Book	vii
Make it Easy With Patterns	1
Patterns Make it Easy	2
Boxes 1	3
Complete the Pattern	4
Puzzler #1	5
Operating Numbers—Four Operations	6
Which Operation?	7
What Does it Mean?	8
Boxes (2)	9
Meaning of Multiplication	10
Meaning of Division	11
Divisibility Rules	12
Puzzler #2	13
Math Vocabulary and Activities	14
Multiple Guess (1)	15
Boxes (3)	16
Least Common Multiple	17
Find Least Common Multiple (1)	18
Find Least Common Multiple (2)	19
Factors	20
Multiple Guess (2)	21
Boxes (4)	22
Greatest Common Factor	23
Find GCF (1)	24
Find GCF (2)	25
Multiple Guess (3)	26
Puzzler #3	27
Prime and Composite Numbers	28
Arrays of Numbers—Prime or Composite? (1)	29
Arrays of Numbers—Prime or Composite? (2)	30
Bedroom Measurements	31
Puzzler #4	32
Build it Up (Prime Factorization Reversed)	33
Break it Down (Composite to Prime)	34
You're Treestylin' Now	35
Powers and Exponents	36
Power Numbers	37

Boxes (5)	38
Test Your Skills (1)	39
Multiple Guess (4)	42
Fractions	43
Know Your Fractions	44
Puzzler #5	45
Converting Improper Fractions to Mixed Numbers	46
Show and Tell	47
Make a Picture	48
Draw It!	49
Pizza Party	50
Identity Property of Multiplication	51
Equivalent Fractions	51
Creating Equivalent Fractions	53
Multiple Guess (5)	54
Boxes (6)	55
More on Equivalent Fractions	56
Simplifying Fractions	57
Writing Fractions in Simplest Form	58
Create and Simplify	59
Simplifying Fractions Through Factorization (1)	60
Simplifying Fractions Through Factorization (2)	61
What's Missing?	62
Ratio	63
Ratio MULTIMAGIC	64
Creating Your Ratios	65
Test Your Skills (2)	66
Fractions to Decimals (1)	69
Fractions to Decimals (2)	70
Decimals to Percents (1)	71
Decimals to Percents (2)	72
Flip the Script (Percents to Decimals)	73
Draw It! (Solving Word Problems Easier)	74
Drawing Ratios	75
Word!	76
Word Challenge Stories	77
Proportion	78
More Proportions	79
Create a Proportion	80
Boxes (7)	81
Test Your Skills (Pre-Post Test)	82
Answers	85

Introduction for Teachers and Parents

Parents

This book provides:

- A useful homework aide for your child.
- A bridge between out-of-school periods and back-to-school time, so kids can sharpen their skills and keep them that way.
- A new, exciting way to motivate your kids to be independent learners, taking the burden off you.
- And more...

It is IDEAL for parents of children who have difficulty in math, or, for those who just want their kids to get and stay ahead of the game.

Using this book in conjunction with the MULTIMAGIC TABLE, your child will learn math concepts faster, enabling him or her to complete more assignments independently. This will automatically increase his or her confidence. Now who doesn't want that?

Teachers

This book can serve multiple purposes in the classroom. Use it as:

- A supplementary math tool to reinforce concepts you've already presented.
- An introductory overview to a new concept.
- An instructional tool for particular math topics.
- An intervention tool for individuals or groups who need a review of the material.
- An assessment guide to help you gauge student mastery of math processes or skills.
- And more...

What the Research Says

Research shows that the types of brain processes that occur on the right side of the brain differ from the left side. The following lists the functions of each side:

<u>Left Brain</u>	<u>Right Brain</u>
Reasoning	Insight
Language (Written/Oral)	Intuition
Number Skills	Art awareness and ability
Mathematical logic	Musical awareness and ability
Scientific ability	Perception and visualization
Memorization	Imagination and creativity
The right side of the body	The left side of the body
Right-handedness	Left-handedness

Some people are left-brained while others are more right-brain oriented. There are some people who have mastered the ability to use both the right and left brain in intellectual activities. We call these people “whole-brained.” These people tend to do better in all subjects, math included.

The color-coding on the table is designed to help integrate both sides of the brain, thereby making it possible for the learner to take in and remember more information in a shorter amount of time. The process of learning math becomes much like listening to music, or looking at a painting, rather than a struggle to try to put it all together.

Try it now and explore your satisfaction and I’m sure others will notice your efforts.

Success to you!

How to Use This Book

Students

1. Start at the beginning and play your way through the book.
2. You can take the pre/post test at the beginning to assess your strengths and weaknesses, or just jump right in and get started.
3. Math Journal—write your observations, steps to solving math problems, and ideas that show how the concept connects to your everyday life.

Important

You need to:

- a. SELF-CORRECT to 100% accuracy.
- b. Do it until you get it right.

Make It Easy With Patterns

Did you know that all math has a pattern?

Once you see, hear, and get it, it's easy.

Here are the 9s multiplication facts.

What do you notice about the answers?

- The green numbers go like this:
"0, 1, 2, 3, 4, 5, 6, 7, 8, 9."
- While the second column blue numbers go:
"9, 8, 7, 6, 5, 4, 3, 2, 1, 0."

BRILLIANT!

You're probably wondering if these patterns work for the other times tables. What do you think?

Let's find out. Read on expectantly. . . .

Tables of 9

$$9 \times 1 = 09$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

$$9 \times 10 = 90$$

Journal—Music Patterns

Using your favorite song, show a pattern with:

- Beat
- Lyrics
- or, rhyme



Patterns Make it Easy

Directions: Complete the chart to find the patterns in the 8's.

Purpose: Strengthening visualization of numbers and mental computation skills.

08, 16, 24, 32, 40, 48, 56, 64, 72, 80...

$8 \times 1 =$	0	8
$8 \times 2 =$		
$8 \times 3 =$		
$8 \times 4 =$		
$8 \times 5 =$		
$8 \times 6 =$		
$8 \times 7 =$		
$8 \times 8 =$		
$8 \times 9 =$		
$8 \times 10 =$		

What is the pattern **reading down** in the first column? _____

What is the pattern **reading up** in the second column? _____

Patterns make it easy because they're linked to something that you already know. That's one of the secrets "A" students use. To make something easier, put it with something that you already know. Can this principle be used with any subject? Yes, yes, a million times YES!

WORK THAT MAGIC:



Boxes (1)

Directions:

- Study your MULTIMAGIC TABLE at eye level for a moment.
- Without looking fill in the missing numbers in the boxes.
- Compare your answers with your MULTIMAGIC TABLE.

Purpose: Brain training; recognizing and remembering patterns; develop number sense and see how numbers are connected; helps to eliminate math anxiety.

	4	
		9

	8	
9		

		6
12		

	7	

	18	
24		

	20	
36		

Complete the Pattern

Directions: Fill in the missing numbers/letters in the sequence.

Purpose: Strengthening visualization of numbers and mental computation skills.

a. 2 4 _____ 8 10 12 _____

b. 2 5 _____ 11 14 _____ 20

c. 1 2 3 _____ 8 _____ 21

d. 96 48 _____ 12 6 _____ 1.5

e. \$240 \$120 _____ \$30 \$15 _____ \$3.75

f. _____ bc cd _____ ef _____ gh

g. 1000 _____ _____ 250 0 -250 _____

WORK THAT MAGIC:



PUZZLER #1

	×		+		= 13
+		-		×	
	-		+		= 12
÷		+		÷	
	×		-		= 50
= 2		= 9		= 2	

1. Draw the number squares below on a sheet of paper. Cut out the numbers 1–9.
2. Place the numbers 1–9 in the blank spaces to make the math sentences true.
3. When the numbers are placed correctly, *all* vertical and horizontal sentences will be true.

1	2	3	4	5
6	7	8	9	

Operating Numbers—Four Operations



When we look at this picture, we instantly see that a surgeon's job is to perform operations. What kind of operation are they performing? It could be a triple by-pass, back surgery, or an appendectomy. There are thousands.

Just as there are different kinds of surgical procedures, there are different operations we use on numbers in math. But, the good thing is, in math there are only four. And they are a whole lot easier than an appendectomy.

Do you know what they are? If you said, addition, subtraction, multiplication, and division, your answer is correct. We use these four operations or procedures to arrive at solutions to even the most technical math problems.

The Right Procedure

Pretend you're a doctor. A patient comes to you with a problem with his knee that needs to be corrected. Do you set up an operation on his stomach? That would be ludicrous (and I'm not talking about the rapper). No. You'd use the operation that would solve the problem.

Again, it's the same in math. Knowing when to add, subtract, multiply, or divide makes math much easier and more enjoyable.

He who does not know when to operate and what operation to perform loses his patience.



Math Wizard
Wisdom

Which Operation?

Directions: Fill in the correct operation on the blank line.

Purpose: Understanding math operations; this will help you when you do word problems.

a. 51 + 43 = 94

b. 25 9 = 16

c. 4 5 = 20

d. -5 -5 = 1

e. 250 230 = 20

f. 6 $\frac{1}{2}$ = 3

g. 1370 56 = 1426

h. 2500 2 = 5000

i. 7 $\frac{1}{2}$ = 14

j. -4 3 = -12

Journal—Multiply Magic

You can multiply two numbers and produce a larger number. You can also multiply two numbers and get a smaller number.

Tell in your journal what you discovered about this after completing the chart above.



WORK THAT MAGIC:



What Does It Mean?

Activity A: Find someone who speaks Spanish. Have them read the sentence and translate it into English. You write in the translation.

Purpose: Part of doing well in math is about being able to translate math terminology into mathematical symbols. This exercise will help you.

1. ¿Usted habla español? _____

2. Toda la matemáticas es fácil cuando usted sabe. _____

3. La matemáticas tiene su propia lengua. _____

Activity B: Match the words/phrases in the colored box to the correct meaning.
The first one has been done as an example.

Add +	Subtract -	Multiply ×	Divide ÷
<i>sum</i>			

Language of Math

sum	3 times as much	in half
difference	all together	discount
product	quotient	increased by 7
tripled	decreased by	average

For the **FUN** of it

Boxes (2)

Directions:

- Study your MULTIMAGIC TABLE at eye level for a moment.
- Without looking fill in the missing numbers in the boxes.
- Compare your answers with your MULTIMAGIC TABLE.

Purpose: Brain training; recognizing and remembering patterns; develop number sense and see how numbers are connected; helps to eliminate math anxiety.

	16	
10		

		60
	55	

	36	45

14		
		36

40		
		70

		72
70		

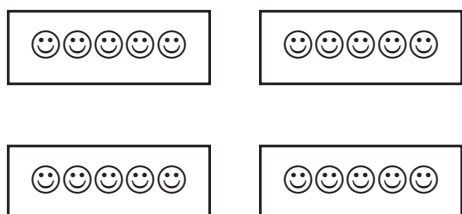
Meaning of Multiplication

Directions:

1. Tell how many groups
2. Tell how many are in each group.
3. Write two multiplication problems to describe each picture.

Purpose: Understanding that multiplication is repeated addition and the opposite of division; understanding properties of numbers and math operations.

Example:

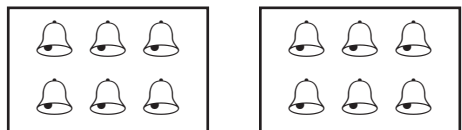


Multiplication:

How many groups (boxes)? (4)

How many in each group (box)? (5)

So, $5 \times 4 = 20$ AND $4 \times 5 = 20$



1.

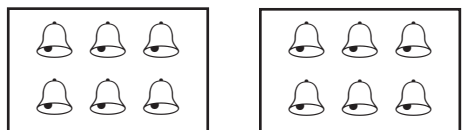
How many groups? _____

How many in each group _____

Multiplication Problems

1. _____

2. _____



2.

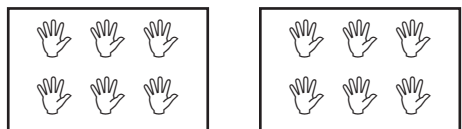
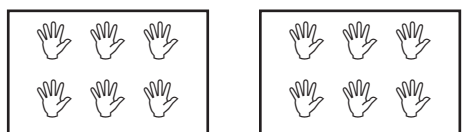
How many groups? _____

How many in each group _____

Multiplication Problems

1. _____

2. _____



WORK THAT MAGIC:

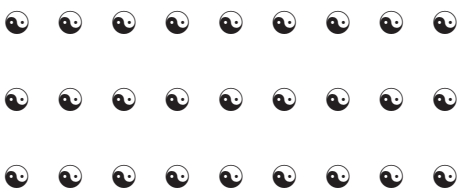


Meaning of Division

Directions:

- Ring into equal groups.
- Write 2 division problems each.

Purpose: Understanding that division is repeated subtraction and the inverse (opposite) of multiplication; understanding properties of numbers and math operations.


1. 

How many groups? _____

How many in each group _____

Division Problems

1. _____
2. _____

2. 

How many groups? _____

How many in each group _____

Division Problems

1. _____
2. _____

Journal—It’s All Relative

Write a paragraph describing how multiplication and division are related.



WORK THAT MAGIC:



Divisibility Rules

Directions: Read the chart and complete letters a–g below.

Purpose: Strengthening mental computation skills; using shortcuts to solve division problems.

A number can be divided by...	If:
2	The last digit is even: 2, 4, 6, 8, or 0.
3	The <i>sum of its digits</i> is divisible by 3 .
4	The <i>last two digits</i> (viewed as a two digit number) are divisible by 4 .
5	If it ends in 0 or 5.
6	It is even and the <i>sum of its digits</i> is divisible by 3 .
8	Its <i>last 3 digits</i> (seen as a three-digit number) are divisible by 8 .
9	The <i>sum of its digits</i> is divisible by 9 .
10	It ends in 0.

Using the chart above, tell what these numbers are divisible by.

a. 12 _____

b. 24 _____

c. 15 _____

d. 105 _____

e. 224 _____

f. 336 _____

g. 927 _____

WORK THAT MAGIC:



PUZZLER #2

	×		÷		= 3
+		-		-	
	-		+		= 6
÷		+		×	
	×		-		= 12
= 2		= 12		= 27	

1. Draw the number squares below on a sheet of paper. Cut out the numbers 1–9.
2. Place the numbers 1–9 in the blank spaces to make the math sentences true.
3. When the numbers are placed correctly, *all* vertical and horizontal sentences will be true.

1	2	3	4	5
6	7	8	9	

Math Vocabulary and Activities

1. **MULTIPLES**—A multiple of a number is the product of that number and a whole number. Multiples are found by multiplying a number by other numbers. We can also “count by” a number to find its multiples.

Count by 5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60 are all multiples of 5.

Memorize tables easier:

- Do “count by’s” — Count by a certain number, say “9’s”, several times each day. Clap, stomp, walk, or dance to it.
- Use music and “rap” your times tables (multiples).
- Hold the MULTIMAGIC TABLE to your upper left.
- Let your eyes slide slowly down a column of numbers (3 times)
- Take MMT down; keep your eyes up and “see” it in your mind’s eye.
- Recite the numbers.

Repeat three times.

*He who knows his multiples,
multiplies his wealth in multiple
ways.*



Math Wizard
Wisdom

Boxes (3)

Directions:

- Study your MULTIMAGIC TABLE at eye level for a moment.
- Without looking fill in the missing numbers in the boxes.
- Compare your answers with your MULTIMAGIC TABLE.

Purpose: Brain training; recognizing and remembering patterns; develop number sense and see how numbers are connected; helps to eliminate math anxiety.

4		
	10	

	9	
		16

		7
	12	

	27	
20		

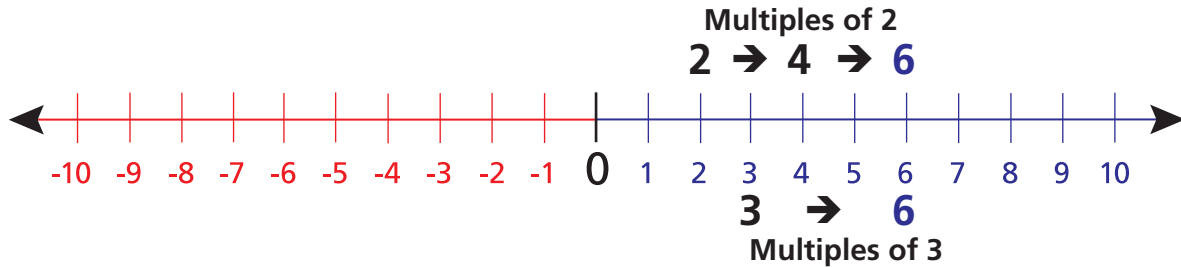
	45	
48		

	22	
		36

2. LEAST COMMON MULTIPLE (LCM)—the smallest number that will divide evenly into the numbers in question.

LCM on the Number Line:

The multiples of 2 are 4, 6, 8... The multiples of 3 are 6, 9, 12...



As you can see on this number line, the first time the multiples match up is 6. **Answer: 6**

MULTIMAGIC—FINDING LCM

Find Least Common Multiple (LCM) of 2 and 3.

- Go down columns 2 and 3
- Stop at the first number they both have in common.
- The lowest common number in both columns is 6.
- So the LCM of 2 and 3 is 6.



Share with three people at least two different ways to find the LCM

Find The Least Common Multiple (1)

Directions: Use your MULTIMAGIC TABLE to find the LCM of the following numbers

Purpose: You'll use this to find the least common denominator when adding fractions with unlike denominators.

Set A

Numbers	LCM
2,3	6
3,4	
4,5	
5,6	
6,7	
7,8	
8,9	
9,10	

Set B

Numbers	LCM
2, 4	
3, 5	
4, 7	
5, 7	
4, 6	
7, 9	
5, 8	
5, 12	

Set C

Numbers	LCM
2, 5	
3, 7	
3, 8	
4, 9	
4, 8	
7, 9	
9, 12	
10, 12	

WORK THAT MAGIC:



Find The Least Common Multiple (2)

Directions: Use your MULTIMAGIC TABLE to find the LCM of the following numbers

Purpose: You'll use this to find the least common denominator when adding fractions with unlike denominators.

Set A

Numbers	LCM
2, 3	6
2, 5	
2, 7	
2, 9	
3, 4	
3, 5	

Set B

Numbers	LCM
3, 7	
3, 8	
3, 11	
4, 5	
4, 7	
4, 11	

Set C

Numbers	LCM
5, 6	
5, 7	
6, 7	
8, 12	
9, 10	
11, 12	

Journal—It's All Relative

Write a paragraph describing how multiples and addition are related.



WORK THAT MAGIC:



3. **FACTORS**—of a number are the numbers that go (divide) into it. They are the numbers that can be multiplied to get that number.

$$\begin{array}{ccc} & 2 \times 3 = 6 & \\ \swarrow & & \swarrow \\ \text{Factor} & & \text{Factor} \end{array}$$

- 12 can be made by: 1×12 or 2×6 or 3×4
- So, the factors of 12 are: 1, 2, 3, 4, 6, 12

1. Using multiplication, there are three different ways to make 16. List them here:

a. _____ \times _____ = 16

b. _____ \times _____ = 16

c. _____ \times _____ = 16

Factors of 16: _____

2. List the ways you can make 24. Then, list the **factors** of 24.

3. List all the different ways to make your favorite number. List the **factors**, too.

WORK THAT MAGIC:



I'm so glad you're exploring this sample 🧡

What you're seeing here is just a small piece of a much larger pattern-based system designed to help students **see math, not struggle through it.**

If this resonated with you, the full *Math Magic Workbook™* and Multimagic Table system go much deeper—helping students build confidence, speed, and real understanding.

👉 You can explore the full system here: EMOMASTERS® Math Magic Library

Either way, I hope this brings more ease and success into your learning space.

