





level 4



Author: Angela O'Dell

**Master Books Creative Team:** 

**Editor:** Willow Meek

**Design:** Terry White

**Cover Design**: Diana Bogardus

Copy Editors: Judy Lewis Willow Meek

**Curriculum Review:** 

Kristen Pratt Laura Welch Diana Bogardus



First printing: January 2022

Copyright © 2022 by Angela O'Dell and Master Books\*. All rights reserved. No part of this book may be reproduced, copied, broadcast, stored, or shared in any form whatsoever without written permission from the publisher, except in the case of brief quotations in articles and reviews. For information write:

Master Books<sup>®</sup>, P.O. Box 726, Green Forest, AR 72638 Master Books<sup>®</sup> is a division of the New Leaf Publishing Group, Inc.

ISBN: 978-1-68344-219-6

ISBN: 978-1-61458-790-3 (digital)

Images are from gettyimage.com, istock.com, and shutterstock.com.

Printed in the United States of America

Please visit our website for other great titles: www.masterbooks.com

Permission is granted for copies of reproducible pages from this text to be made for use with immediate family members living in the same household. However, no part of this book may be reproduced, copied, broadcast, stored, or shared in any form beyond this use. Permission for any other use of the material must be requested by email from the publisher at info@nlpg.com.



#### **Author Bio:**

As a homeschooling mom and author, **Angela O'Dell** embraces many aspects of the Charlotte Mason method yet knows that modern children need an education that fits the needs of this generation. Based upon her foundational belief in a living God for a living education, she has worked to bring a curriculum that will reach deep into the heart of home-educated children and their families. She has written over 20 books, including her history series and her math series. Angela's goal is to bring materials that teach and train hearts and minds to find the answers for our generation in the never-changing truth of God and His Word.

## Scope and Sequence

Welcome to Practice Makes Perfect Level 4	4
Worksheet Section	
Lesson 1: Review of All Addition and Subtraction Concepts	7
Lesson 2: Review of Place Value, Estimation, and Rounding	
Lesson 3: Review of All Multiplication	
Lesson 4: Review of All Division	31
Lesson 5: Review of All Fractions and Measurement	39
Lesson 6: Review of All Roman Numerals and Shapes	43
Lesson 7: New: Fraction Concepts (adding and subtracting like denominators)	51
Lesson 8: New: Multiplication with Carrying Using 11's and 12's	
Lesson 9: Measurements and Geometric Concepts	67
Lesson 10: Review of All New Concepts	75
Lesson 11: Steps of Division (single digit divisor, no remainder)	81
Lesson 12: Number Grouping - Understanding Larger Multiplication	87
Lesson 13: More About Division - Including Checking Division	93
Lesson 14: Division with a Remainder (single digit divisor)	99
Lesson 15: Metric Units of Measure	105
Lesson 16: Review of All New Concepts	113
Lesson 17: Introducing Mixed Numbers (adding and subtracting with like denominators)	121
Lesson 18: Introducing Equivalent Fractions through Pictures	127
Lesson 19: More About Equivalent Fractions	137
Lesson 20: Larger Number Multiplication with Carrying	143
Lesson 21: Review of All New Concepts	149
Lesson 22: Writing Decimals and Fractions	155
Lesson 23: Money Work with Decimals and Fractions	165
Lesson 24: Relationship Between Fractions, Decimals, and Percents	171
Lesson 25: Geometry.	179
Lesson 26: More Geometry	185
Lesson 27: Review of All New Concepts	199
Lesson 28: Work with Charts and Graphs	205
Lesson 29: Constructing Charts and Graphs	211
Lesson 30: Introducing Averaging	215
Quiz Section	
Quiz 1: Take after Lesson 10	223
Quiz 2: Take after Lesson 16	225
Quiz 3: Take after Lesson 21	227
Quiz 4: Take after Lesson 30	229
Solutions Manual	
Worksheet Solutions	231
Quiz Solutions	269

## Welcome to Practice Makes Perfect Level 4

Please carefully read through the following sections on how and when to use this optional *Math Lessons* for a Living Education supplemental product. It is necessary to have the main student book in order to complete these pages.

#### How to Implement Practice Makes Perfect

- After your student finishes with their lesson activity in their *Math Lessons* curriculum workbook, you, the parent, may decide to have them complete a little more practice.
- Please do not feel like you need to use every single activity page. Instead, choose activity pages based
  on the individual need of your student. If they need more practice or they would like to do more
  activity sheets, simply give them the page which meets their need.
- There are four quarterly quizzes included in each level of *Practice Makes Perfect*. Please remember, these are not mandatory. The oral narrations and the interactive nature of the *Math Lessons for a Living Education* curriculum is plenty for many families.

#### The Purpose and Goals of Practice Makes Perfect

• These extra practice pages are a resource for when a little extra practice is needed or wanted, and to give the families using the *Math Lessons for a Living Education* curriculum series helpful support in the form of four quarterly quizzes, which they can keep for their written records when such records are required by their state's educational laws.

#### Goals, Tips, and Focus for Review Lessons 31-36:

Lessons 31–36 are focused review lessons for the major concepts taught in this level of *Math Lessons for a Living Education*. Because these lessons are already focused reviews, there are no extra review pages in this *Practice Makes Perfect*. The goal for these lessons is for you, the parent, to be able to ensure your student has a good mastery of the concepts. To determine mastery, ask yourself these questions:

- Does my child show mastery through application? For example, can my child apply this concept in unrehearsed situations (not in their math book) to which I purposefully expose them?
- Does my child show mastery through real world connections? Do they purposefully and correctly use their math knowledge in real life?

#### How to make the most of the reviews:

As your child works through each of these review lessons, take the time to watch them interact with the concepts. Watch carefully how they interact with any manipulatives, the confidence they use when presenting any show-and-tell projects, and their ability to orally narrate their understanding of any and all of the concepts reviewed in these lessons. After they are finished with these review lessons, you have the option of having them complete the Quarter 4 Quiz.

#### **Supply List**

The following supplies are needed for completing these activities: tape measure, crayons, scissors, ruler, printer or construction paper, markers, small items (beans, beads, marbles, pennies, etc.), small containers or plates.

# Worksheet Section



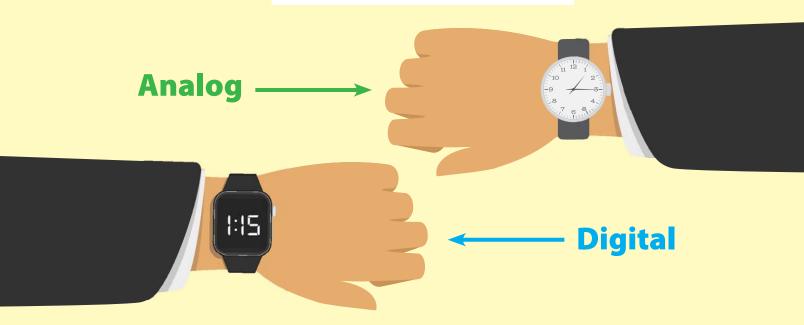
## Let's get started!



#### **Review of All Addition and Subtraction Concepts**

Let's start off *Practice Makes Perfect 4* with a fun review of clocks and telling time. Use today's practice time to review and practice all of the following concepts! Make your page fun and colorful, and if you would like, hang it like a poster on your wall.

## It's About Time



The short hand is the \_\_\_\_\_ hand.

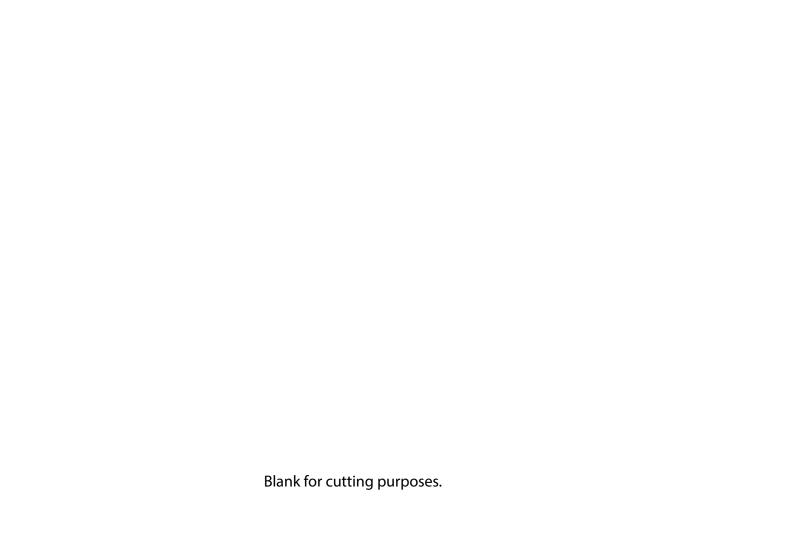
The long hand is the \_\_\_\_\_ hand.

There are \_\_\_\_\_ minutes in 1 hour.

There are \_\_\_\_\_ minutes in a half hour.

On a \_\_\_\_\_ clock, o'clock = 00.

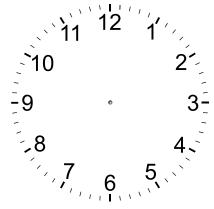
On a digital clock, half past the hour is \_\_\_\_\_



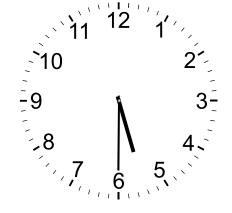
Study the clocks below and fill in the needed information to make the statement about each pair true.



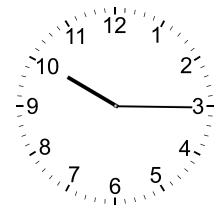
1. If it's 5:30 now, what time was it 3 hours and 10 minutes ago?



Draw and write the time.



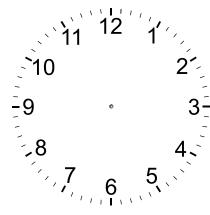
2. If it's 10:15 now, what time will it be in 6 hours?



× 11	12	1'
10		2
-9	•	3-
.8		4.
7,7	6	5,

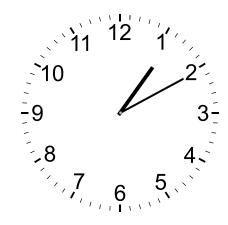
Draw and write the time.

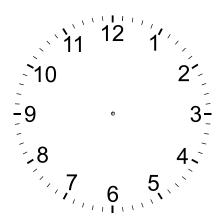
3. If it will be 7:05 in 4 hours, what time is it now?



Draw and write the time.

4. If it is 1:10 now, what time will it be in 12 hours?





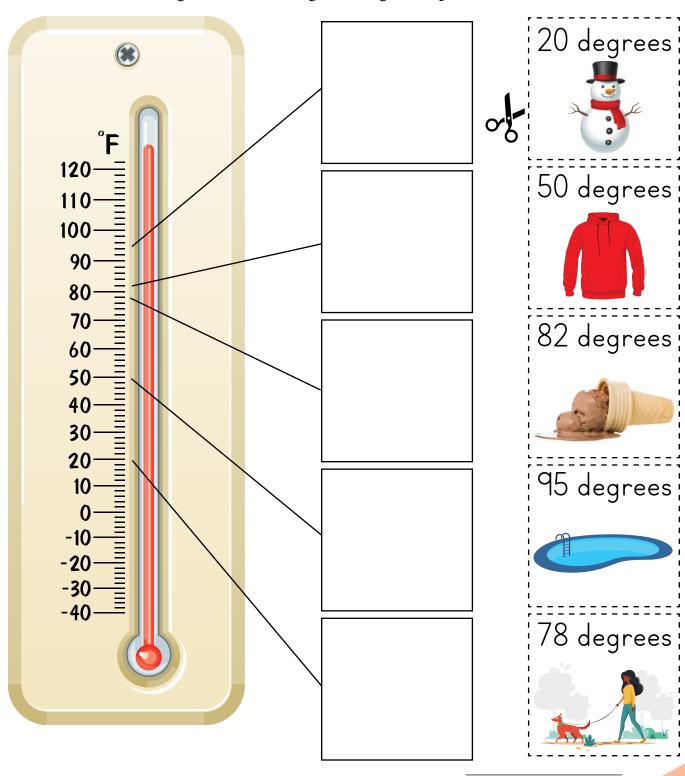
Draw and write the time.

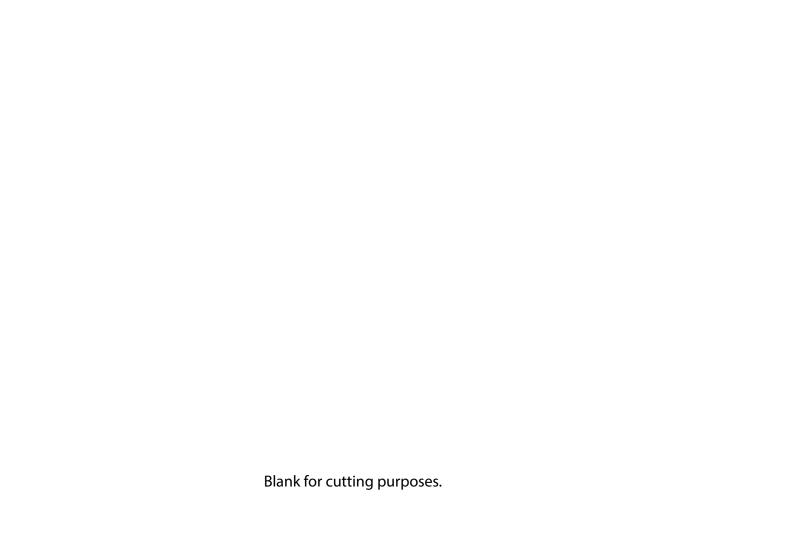
Fill in the missing numbers and operation signs.

Fill in the blanks with <, >, or =.

$$7 \times 3$$
 4  $\times 5$ 

Hello friend! Being able to read a thermometer is an extremely useful skill. It's not only important to be able to read one of these gauges, you also need to understand how temperatures affect the world around us and our own lives. This activity will help you reinforce that knowledge. Cut out the degrees images and paste them on the correct box.





Addition

Subtraction

Multiplication

Division

Today, you are going to be creating a Clue Words Study Buddy. In Lesson 1 Exercise 4 of your *Math Level 4* workbook, you worked through several word problems, solving and circling the clue words that helped you know how to solve them. In previous levels of *Math Lessons*, you have learned and practiced story problems using all four of the operations while solving story problems. As you move through *Math Level 4*, you will be solving many types of story problems. Now is a great time to review and practice these skills by creating a handy tool to use whenever you need it. Have fun and be as creative as you can!

What you will need for your Clue Words Study Buddy:

- ☐ A clean sheet of white or light-colored printer or construction paper
- ☐ Four colors of markers
- □ Scissors



- 1. Shutter fold the paper as shown.
- 2. Carefully cut each shutter in half.
- 3. Write: Addition +, Multiplication x, Division ÷, and Subtraction on each of the shutter sections.
- 4. Inside, write the clue words for each operation. Here are a few to start you out:

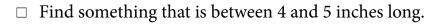
Addition: add, all, all together...

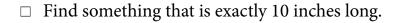
Subtraction: take away, minus, less than...

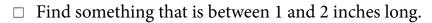
Multiplication: times, together...

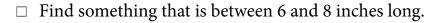
Division: divided, split, goes into...

In today's practice lesson, you are going to go on a measuring scavenger hunt. Measurements are all around us, so be creative and find some unusual objects to measure!











☐ Find something that is exactly 3 inches long.

Create a long subtraction problem for your teacher to solve.

Create a long addition problem for your teacher to solve.

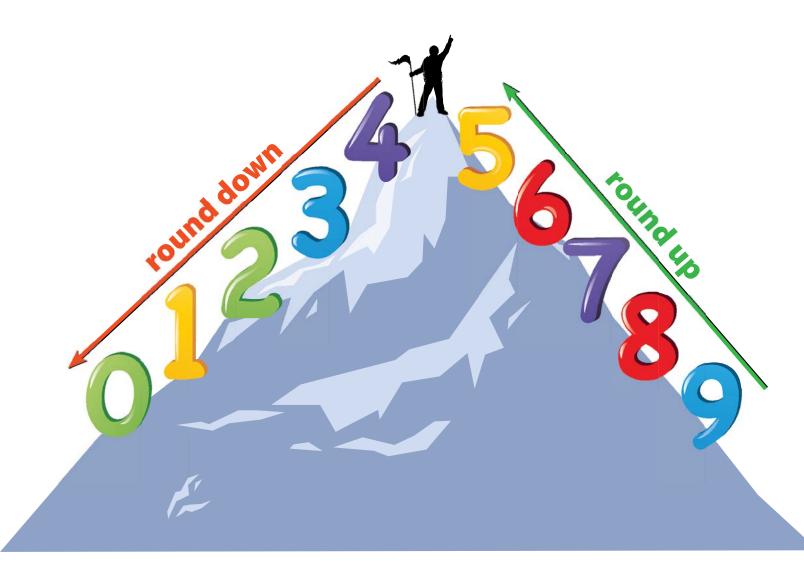
Create a story problem for your teacher to solve. Use as many operations as you can.

#### Review of Place Value, Estimation, and Rounding

**Rounding Mountian.** Rounding can be a challenging concept! Let's take time in this week's practice exercises to make sure you know it "like the back of your hand." Remember, if the digit in the place to the right of the place you are rounding to is 0 through 4, you round down. If it is 5 through 9, you round up.

Using the graphic below as a guide, create your own Rounding Study Buddy. On a piece of printer or construction paper, draw a mountain and write numbers and arrows as shown. Fun option: Add a small photo of yourself at the top!

Keep your study buddy in a safe place for future use.



#### Round and estimate.

12 rounds to \_\_\_\_\_ <u>+</u>34 rounds to \_\_\_\_\_

estimated sum: \_\_\_\_

75 rounds to \_\_\_\_\_ <u>+ 54</u> rounds to \_\_\_\_\_

estimated sum: \_\_\_\_\_

346 rounds to \_\_\_\_\_ + 120 rounds to \_\_\_\_

estimated sum: \_\_\_\_\_

6,345 rounds to \_\_\_\_\_ <u>+</u> 2,109 rounds to \_\_\_\_\_

estimated sum: \_\_\_\_

3,298 rounds to \_\_\_\_\_ <u>+</u> 1,873 rounds to \_\_\_\_\_

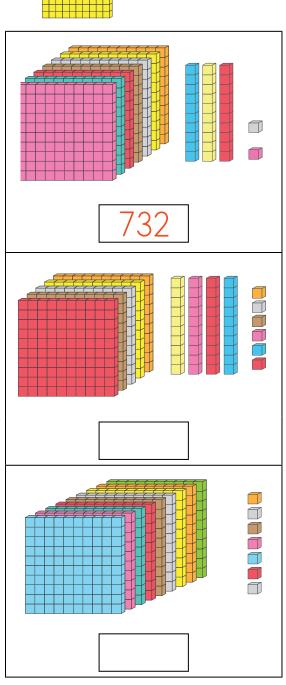
estimated sum: \_\_\_\_\_

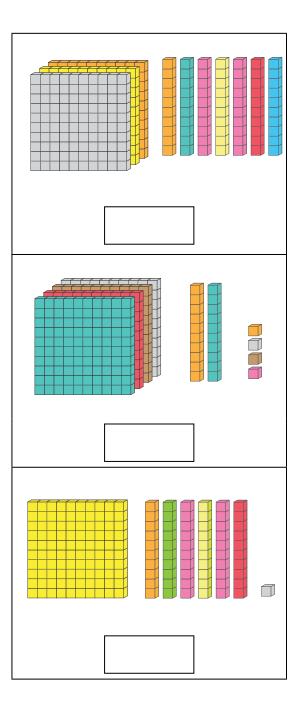
Now go back and find the actual answer to each problem.

16

#### **Place Value**

Using the chart below, add the cubes in each square and write your answer in the box provided. The first one is done for you.

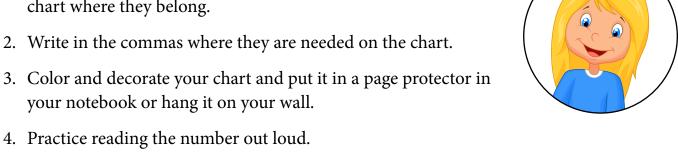




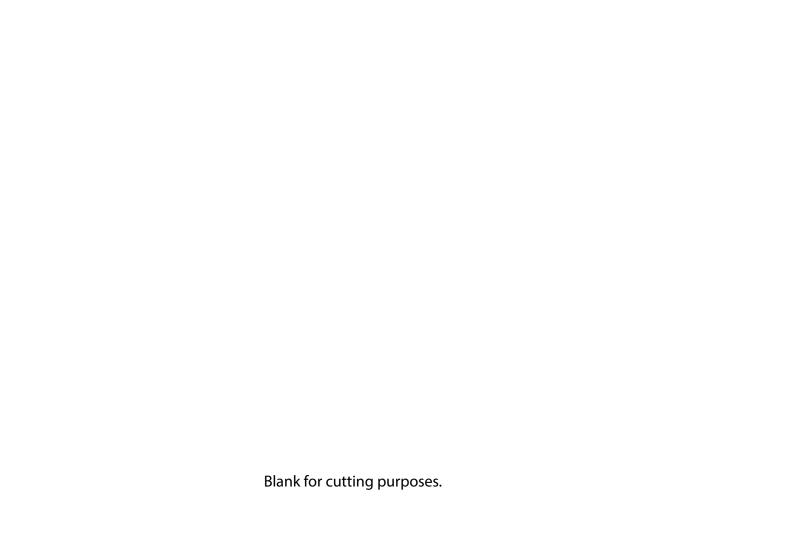
#### **Place Value Chart**

Directions:

- 1. Cut out the names of the place value places and glue them onto the chart where they belong.



8	3	7		3	q	4
		<b>'</b>	•			



Solve these story problems.

1. You and your friend were making chocolate chip cookies for a fall church potluck. You got carried away laughing and joking and, before you realized it, you ate 19 chocolate chips! Your friend also ate a bunch of chocolatey goodness. Together, you ate 32 chocolate chips. How many did your friend eat?

2. The bag of chocolate chips you and your friend were using for your cookie project was a big one that your mom bought from the wholesale club. When you first opened it, your brother counted all of the chocolate chips in the bag and found that it contained 467 morsels of yumminess. After you and your friend ate some, how many were left for the baking project?

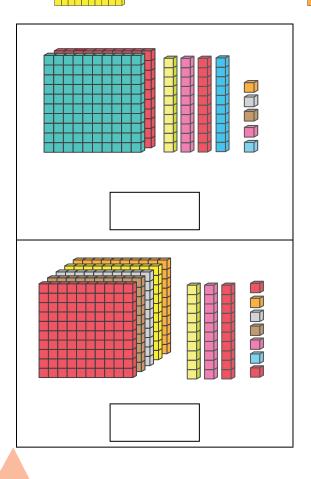
3. You and your friend had so much fun making and baking cookies! The cookies you made used up 231 of the chocolate chips. How many chocolate chips did your friend's cookies use?

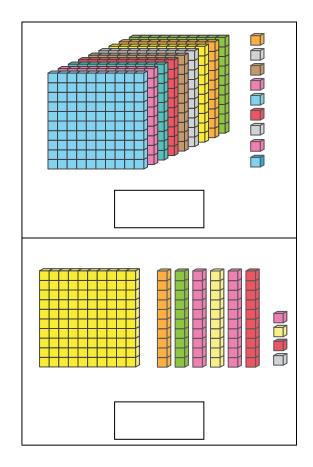
Lesson 2

4. Which one of these shows 9,170?

5. Which one of these shows 562?

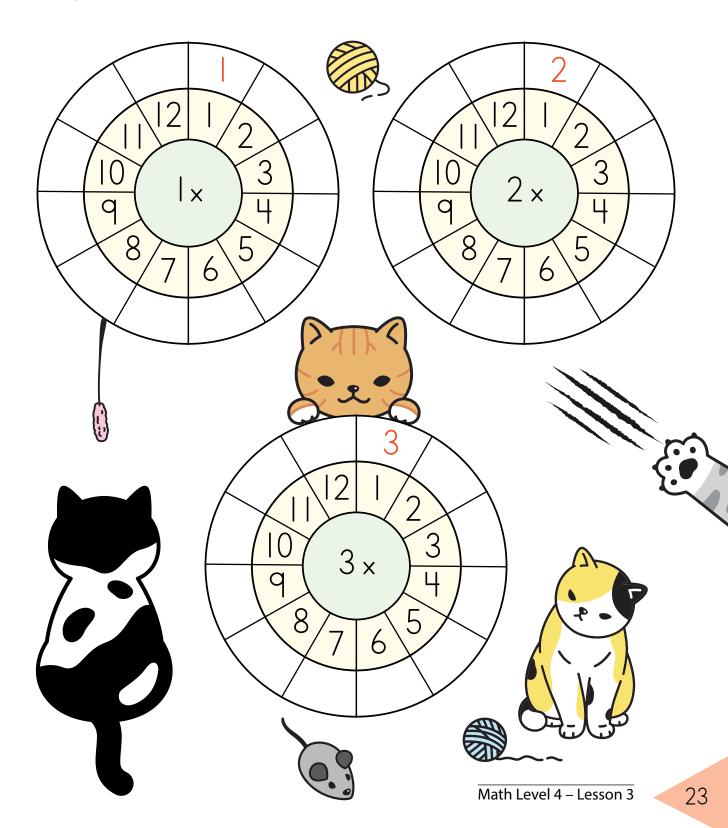
Using the chart below, add the cubes in each square and write your answer in the box provided.





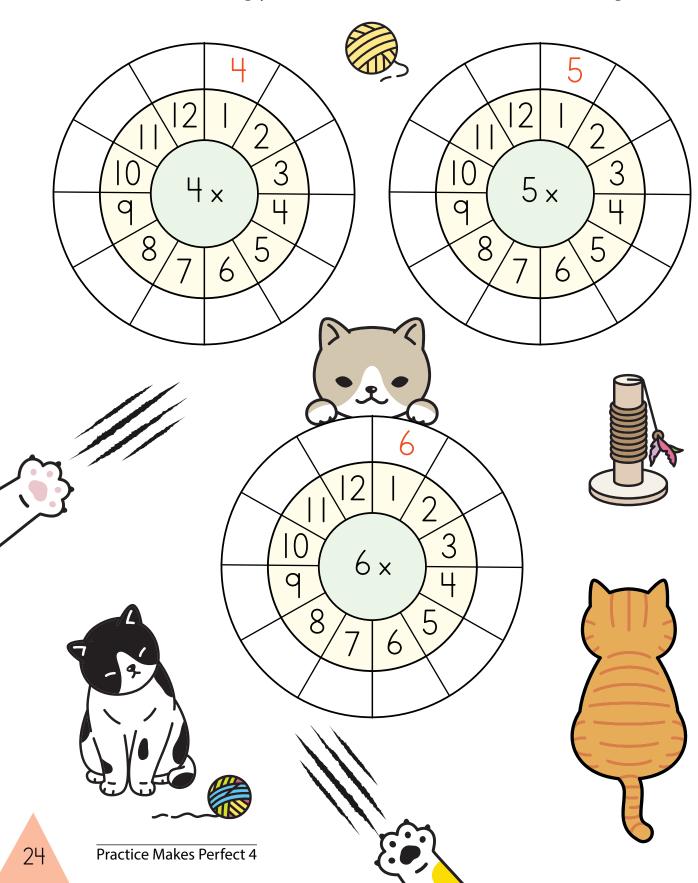
## **Review of All Multiplication**

Let's practice multiplying by 1 through 6's using our fun wheels. Start in the center and multiply outward. Write the answer in the outer circle spaces.

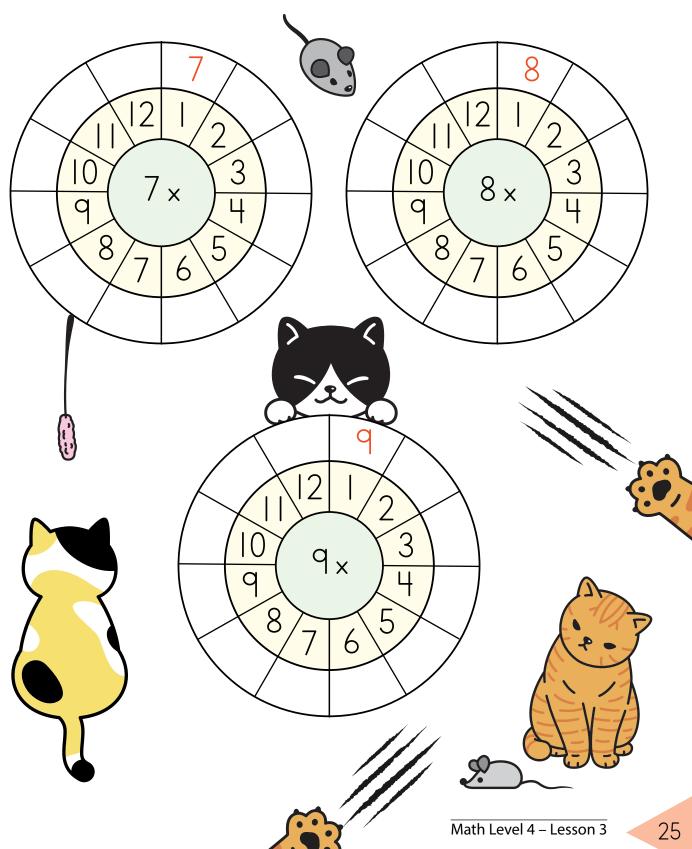


Lesson 3

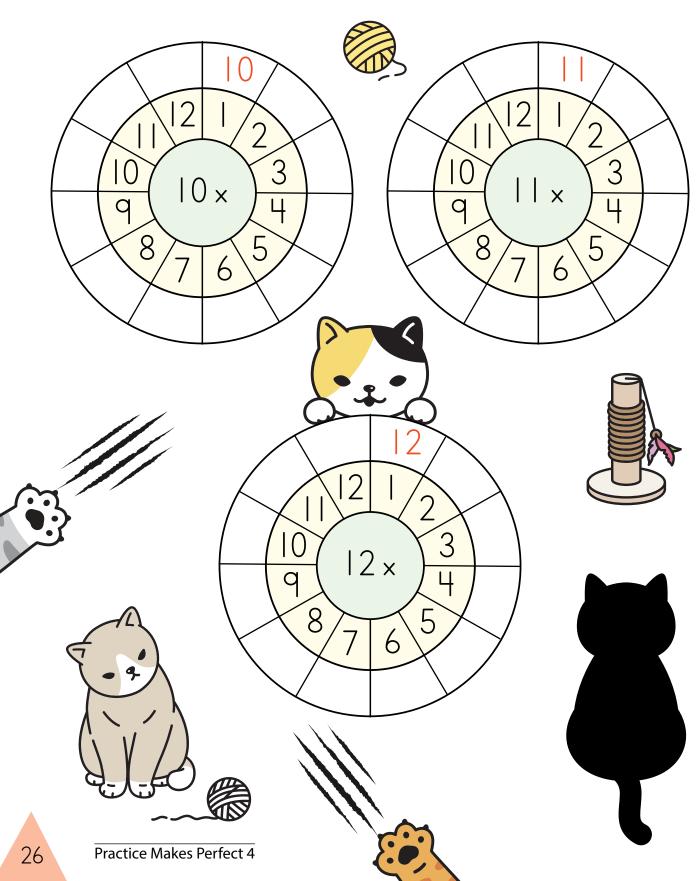
Start in the center and multiply outward. Write the answer in the outer circle spaces.



Let's practice multiplying by 7 through 12's using our fun wheels. Start in the center and multiply outward. Write the answer in the outer circle spaces.

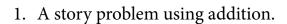


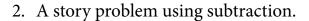
Start in the center and multiply outward. Write the answer in the outer circle spaces.



Fill in the missing addends in each of these problems. Do you remember how to find the answers? Here's a hint: Use the operation that is the opposite of addition. The first one is done for you.

Use your Clue Words Study Buddy that you made in Lesson 1 Exercise 4 to help you create four story problems. Give them to your parent or older sibling to solve.





### 3. A story problem using multiplication.

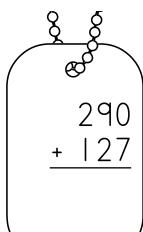
Name\_

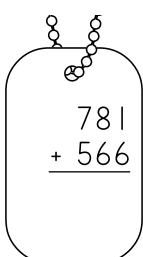
4. Challenge: A story problem using division.

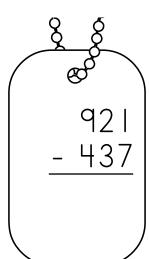
#### **BONUS!**

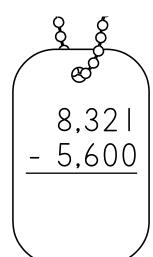
Create a story problem using at least two of the operations.

Complete the addition and subtraction problems below.

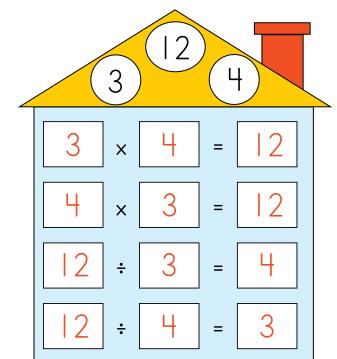


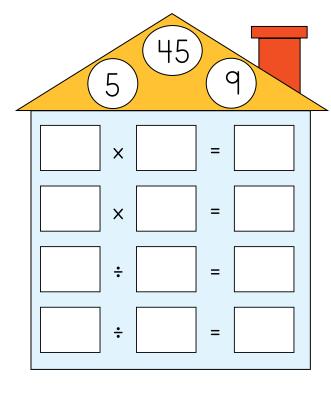


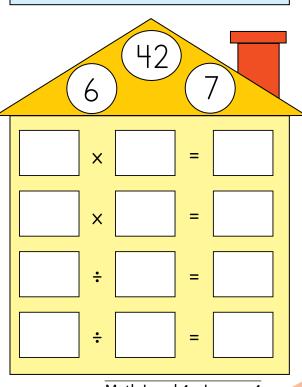


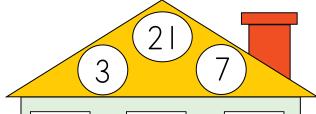


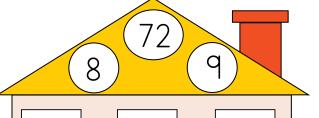
**Review of All Division.** Isn't it fascinating how numbers go together? In today's practice exercise, you will practice putting together numbers in their fact families. One of the most amazing facts about numbers, and something which reminds us of God's character, is this: No matter what, number facts do not change. They are the same right now as they were thousands of years ago. Think about this as you practice these fact families. The first one is done for you.

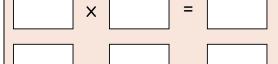








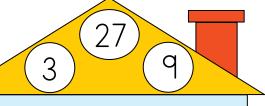




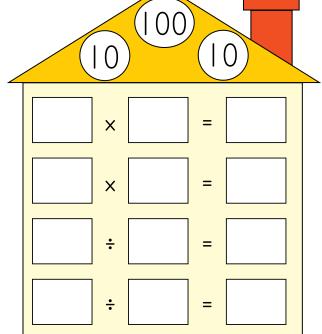
|--|

÷	=	









Mental math grows your brain. It's a fact! When you practice mental math, it's like you are carefully teaching your brain to be quick and sharp. The more you practice, the faster your brain follows your commands.

Today you are going to begin creating mental math task cards.

Cut out and laminate each of the cards below. Ask your teacher to help you with laminating. Use a washable marker to write in numbers and solve your mental math equations.

#### **Start with**

- 3
- Add
- 5
- Subtract 2
- Multiply 5



What is your number?

30

#### **Start with**

- Multiply \_
- Divide



What is your number? \_\_\_

#### **Start with**



- Multiply \_\_\_\_\_
- Divide

What is your number? \_\_\_\_

#### Start with



- Divide \_\_\_\_
- Multiply \_\_\_\_\_

What is your number? \_

#### **Start with**

- Add
- Divide
- Multiply

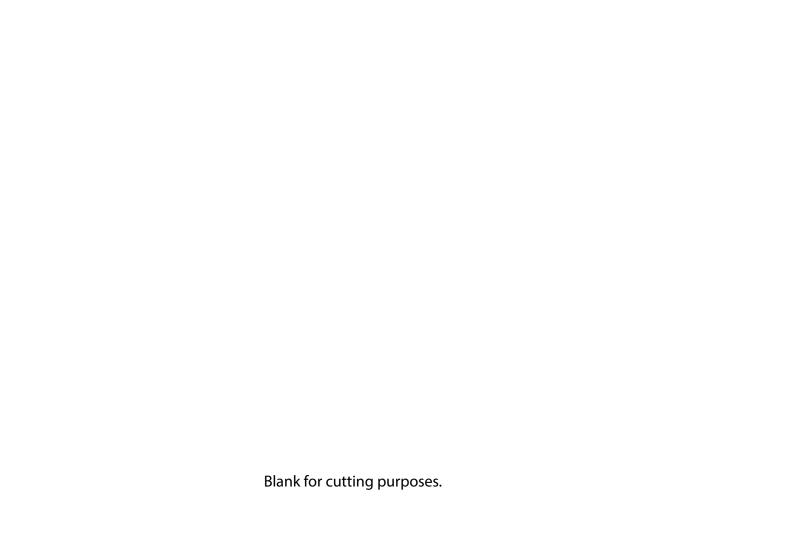
What is your number? \_\_\_\_\_

#### **Start with**

- Subtract \_
- Multiply \_\_\_\_\_
- Divide

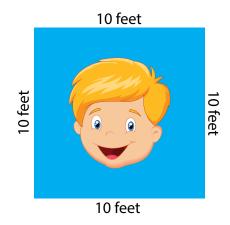


What is your number? \_\_\_

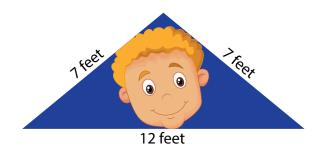


## **Shape Perimeter**

The perimeter of a polygon is the distance around it. To find the perimeter of a shape, simply add the sides together.



\_\_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ = \_\_\_\_ feet



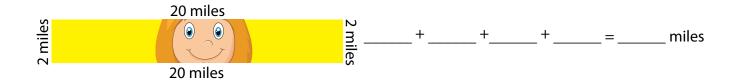
+ + = feet



5 \_\_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ = \_\_\_\_ inches









This square has a total perimeter of 32 yards. How long is each side?

32 ÷ \_\_\_\_\_ = \_\_\_\_ yards on each side

**Multiplication and Division Facts Roundup.** Solve the problems, then draw a line to match each multiplication and division fact that go together.

$$3 \times 2 =$$

$$8 \times 4 =$$

$$8 \times 2 =$$

$$6 \div 2 =$$

$$3 \times 3 =$$

$$8 \times 5 =$$

$$|8 \div 3| =$$

$$3 \times 5 =$$

$$3 \times 4 =$$

$$16 \div 2 =$$

$$8 \times 3 =$$

$$40 \div 5 =$$

$$8 \times 6 =$$

$$24 \div 3 =$$

$$3 \times 6 =$$

$$15 \div 5 =$$

## Find the Sign!

In each box, circle the sign that makes the statement true.





