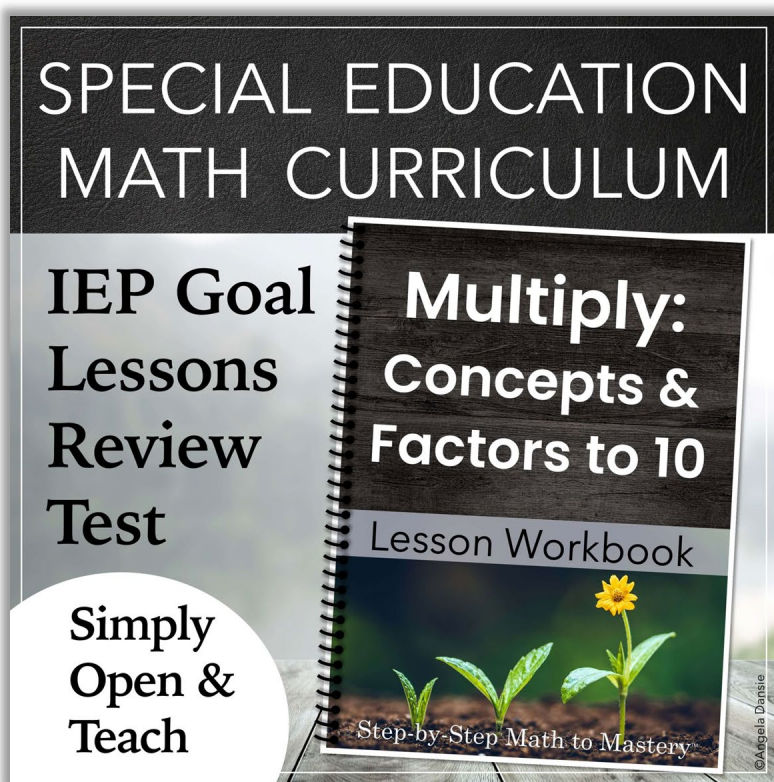


— Step-by-Step —
Math to Mastery
FOR SPECIAL EDUCATION & INTERVENTION

*Preview &
Sample Lesson*



Hello!

I'm excited to show you my updated Step-by-Step Math to Mastery™ resources!

This preview will answer several frequently asked questions and give you a chance to see a sample lesson straight from the workbook.

If you have more questions or would like to request a product catalog don't hesitate to email me.

Angela Dansie

angela@mathtomastery.com

Skip to Sample Lesson

Have a question? Click to the Answer

Are these resources standards-based? Evidence-based? [ANSWER](#)

Will they be a good fit for my students? [ANSWER](#)

Do students respond well to these lessons? [ANSWER](#)

How do you teach a lesson? [ANSWER](#)

How do you prep and organize materials? [ANSWER](#)

What is the recommended sequence of workbooks? [ANSWER](#)

Can I share this with another teacher? [ANSWER](#)

How can I get a discount? [ANSWER](#)

Standards-Based

K-5th grade standards addressing numbers, addition, subtraction, multiplication, division, fractions, and decimals are covered.

The lesson workbooks are linked to Common Core State Standards so the standards can be referenced when writing IEP goals. Not every math standard is taught. These resources are focused on mastering essential foundational skills in a straightforward way.

An example IEP goal and objectives are included in each lesson workbook, along with the corresponding standard(s).

Evidence-Based

High-Leverage Practices in Special Education found in Step-by-Step Math to Mastery materials include:

- #12 Systematically Design Instruction Towards Learning Goals
- #14 Use Cognitive and Metacognitive Strategies (Schema Instruction)
- #15 Provide Scaffolded Supports
- #16 Use Explicit Instruction

Teacher-directed instruction is explicit and systematic. Skills are broken down into small steps, reducing cognitive load. Lessons progress incrementally from basic to more complex procedures. Clear, precise language is used so teachers and paraeducators can explain model problems simply and consistently.

Word problems are taught using schema-based instruction.

Special Learners

Step-by-Step Math to Mastery™ resources were created for students who need extra support, preferably in a small group or 1-on-1 setting. These lessons have been used in special education classrooms, intervention groups, Title 1 and English language learner programs, after school tutoring, and in homeschools.

Many math books simultaneously introduce two or more problem-solving strategies. This often confuses struggling students. In these lessons, only one strategy is taught at a time for students to master before moving to the next step.

These lessons could benefit all students, especially students who have:

- **Attention difficulties**—minimal visual clutter, short lessons, simple instructions, clear stopping point
- **Learning disabilities**—objectives are carefully sequenced in small chunks with explicit step-by-step instruction and many practice repetitions
- **Slower processing speed**—accuracy is emphasized rather than speed; mastering a skill will increase automaticity
- **Language difficulties**—
Receptive Language: Teacher directions and vocabulary are simple, consistent, and concise.
Expressive Language: Rather than asking students with limited verbal skills to ‘explain their thinking’, teach them how to state the steps they are following.
- **Executive functioning difficulties**—clear expectations and predictable routine, organized layout with white space and fewer problems per page
- **Fine motor issues**—larger font and space for writing answers; students are not asked to write many words or sentences

Student Success

I get feedback from teachers and parents of students in elementary, middle school, and high school. What I love most is hearing about a student's success.

I am using several of these units with a couple of students who experienced prenatal alcohol and drug exposure . . . I **have seen them go from being completely overwhelmed and shut down in math to being excited to show me their progress each day.** I cannot recommend these highly enough!
–Melissa H.

This is hands down the best math resource I have found. My daughter wasn't retaining info from our previous curriculum so we were in need of a new approach. She has actually **retained what she is learning** with this. –Shelly G.

I've been looking for a good math intervention program for my students and this one is awesome! **My students are making so many gains! One of my students felt so successful that he asked for homework!** I liked this so much I got the entire program!
–Jacqueline R.

This resource is amazing!! I have used it with my 3rd grade math intervention groups and my students are actually adding and subtracting with borrowing and regrouping. **I have seen such a huge growth** since using these pages!
–Kelsie L.

I love the **confidence** this gives my students! –Kate S.

Amazing! Used in a resource room and students and their parents kept commenting how they wished the classroom teacher used this program. Highly recommend! –Jennifer M.

My students really enjoy this math. It is easier for them to understand than the curriculum the school is using. They need something very clear and straightforward and this is IT! –Tracey M.

I love the approach and routine to your math units and the multiplication was no exception! **Students with Intellectual Disability were multiplying with pride and parents were very tickled!** Great evidenced-based structure.
–Melissa G.

Simple steps and explanations **helped my ELL students tremendously.** –L. G.

My intervention students have blossomed with using this resource. It is extremely thorough and guides the students through scaffolded steps to achieve competency. Couldn't ask for a better resource! –Lindsey D.

My 4th and 5th grader students with learning disabilities are **finally feeling successful in math!** –Kimberly D.

I used this resource to teach a child from Somalia how to regroup with subtraction. The explicit instruction was instrumental in helping the child conceptualize regrouping. I also appreciate the numerous sheets available for additional practice. Thank you! –Baudelina A.

This was exactly what I was going for. I've been using it all school-year and **I've never seen my kids make progress like they have.** –Danielle D.

Lesson Presentation

There is not just one right way to use the workbooks. They can be adapted to your student needs, your setting, and time constraints.

General guidelines for how to present model problems and prompt student responses are found on the next page.

Here is how I use the lesson workbooks:

My setting is a small group pull-out at the elementary level (mild/moderate). Students sit at a kidney table facing me and a white board behind me.

Warm-up:

- We begin with a number sense & place value warm-up.
- This may include skip counting, missing number flashcards, and a page from a daily practice workbook.

Model: 5 minutes

- I state the lesson objective and write one model problem on the white board at a time and think out loud while I demonstrate each step.
- I ask students to repeat and recite the steps, rules, and vocabulary with me.

Guided Practice: 10 minutes

- During guided practice I continue working problems on the board. I ask students for the next step as if they are coaching me through the problems.
- When they are answering confidently, I often have a student come to the board to work a problem. I've found students enjoy the chance to "be the teacher" and it gives the others a chance to practice being a respectful audience.

Independent Practice: 15 minutes (more or less)

- Students spread out and go to their individual tables/desks where they can focus quietly during this time.
- They work at their own pace, quietly, and raise their hands when finished so I can quickly check their work and give immediate feedback.
- Quick finishers might be given a set of fact flashcards or a fluency timing to practice while the others finish.

When I have a group that is answering accurately and flying at a faster pace, I reduce the number of practice problems and may do two lessons a day.

If we have time, we do a few word problems together or practice telling time or counting money—whatever I'd like to spend a few minutes reviewing.

Keep Students Engaged

"A responding student is a learning student."

Model each skill step-by-step and think out loud while you demonstrate. Give many opportunities for each student to respond during *guided practice*. Don't move to *independent practice* until students are confident with the skill.

Model: Teacher solves problems on the white board or on the paper so everyone can see. Talk through the problem out loud, step by step.

I look at ...

I think ...

I see that ...

I write ...

I remember ...

I say ...

Have students recite the steps and any new rules or vocabulary as you work.

"I add the ones column. What do I do?"

"The rule is ... Say it with me ..."

"(Vocab word) means ... Say that with me ..."

Guided Practice: Teacher and students work problems together. Solve together on the white board, projector or teacher's paper.

1. Start → Teacher models correct response before asking a question
"First we look at the sign. What do we do first, everyone?"
2. Fade to → Whole group choral responses
"What is the next step, everyone?"
3. Fade to → Individual responses
"What numbers are in the tens column, ... Andrew?"
4. Fade to → Solve on individual papers at the same time
Individual responses as you go through the steps together and students write on their papers
"Count back, ... Hailey." "What is the difference, ... Max?" "Everyone write it."

More Options →

- Invite students to come to the board and demonstrate solving problems and talking through the steps. Give each student a chance to be the "teacher" while others practice being a respectful audience.
- Pair students up with a partner. Both solve the same problem, then they quickly compare answers. Or they may take turns demonstrating how to solve a problem while the other watches and checks the answer.

Independent Practice: Students work quietly at their own pace. They may ask for help if needed, but encourage and praise independent work.

Easy to Teach

I know how many things special education teachers have on their plates. It is important to me to make these resources as simple to use as possible.

"I was so scared to buy this [K-5 Math Bundle] because of the price but after 2 months it has **easily saved me that much time** spent after my contracted hours putting things together. I can just **hand it to my paras and they can teach the students without me micromanaging.**" –Whitney H.

The practicality of these units is off the charts!!! They make math time **so much easier for me to plan!!**
–Janelle M.

As a special ed teacher who provides push-in support to students at a variety of levels, your math interventions have been a **lifesaver** this year! I'm able to pinpoint where to start my kids, can **easily align it to the standards**, and I don't end up spending hours sifting through websites online trying to find math work that will fit my kids' needs. Thank you! –Kimberly D.

This is a **godsend for teachers who have to program for a wide range of abilities, simultaneously.** –Juliana R.

I love all of your bundles. They **make doing math a breeze** with my kiddos. It used to take me hours to prep and think of what to do – because I have **four different levels in my classroom**. Now I just follow your curriculum for each different level. Thanks for your great stuff. –Marci G.

This resource is **easy to use for my students and paras.** Thanks! –Rachel W.

I was looking for a resource for my 1st and 2nd grade resource room. General education materials made teaching math cumbersome. I felt like I spent more time teaching the various components of the program and teaching math was secondary. This is just what I needed to **make math manageable** for my special learners. I love that examples are concrete and instruction is direct. Thank you so much!
–Sherri H.

This is a great resource for math rotations. I teach 4-8 AU/ED/ID in a self-contained classroom in a public separate school. My **capable para is able to implement this easily and it is effective** in teaching the students.
–Emily S.

This is an excellent resource for those self-contained special education teachers that have to reinvent the wheel to put together a curriculum to meet the needs of their students that are not low enough to take the alternate assessment.. –Success Beyond the Box Teaching Materials

I can't say enough about this resource. Best I've ever bought from TPT. I have four grades in my classroom, at the same time. **This makes math time stress free, while everyone works on what they need to target.** Thank you!
–Everyday I'm Teaching It

It works perfect for having a para work with the student. –Jennifer B.

Prep & Organize

Once you have decided which lessons to teach, you may want to print and bind individual student workbooks.

1. Print the student booklet cover onto colored cardstock for a bit of durability
2. Print the lesson pages double-sided. Black & white, no color ink needed.
3. Bind the workbook together using what you have (staple, spiral binding, three-hole punched in a binder, or with binder rings)

In my classroom . . .

- I would plan what I would teach the coming month and spend an hour of my prep time printing and assembling student workbooks.
- The method I used was a double-hole-punch at the top, fastening booklets together with two 1" binder rings. I fastened workbooks at the top to avoid anything on the sides interfering with handwriting.
- Each math group had a separate Sterilite™ bin to store the workbooks in as well as any flashcards or base ten blocks or other manipulatives.
- After students finished a workbook I would take the binder rings out and staple the book to send home. Then I re-used the binder rings in the next workbook.

I know these lessons are a lot of pages, and it can be a concern when you are limited in the number of pages you may print and copy. If you live in an area with a print shop it may be worth looking into having them printed there if your school will reimburse you.

Printed coil-bound workbooks are available at mathtomastery.com so you can save your prep time for other things and have professionally printed workbooks delivered to your door. Just another option to consider!

Suggested Sequence

Placement Test

Visit mathtomastery.com to download a free placement test.

Step-by-Step Math to Mastery™ Lesson Workbook Sequence

Basic Addition and Subtraction

- 1. Addition and Subtraction: Numbers to 10
- 2. Addition and Subtraction: Word Problems
- 3. Addition and Subtraction: Three Addends and Teen Numbers
- 4. Addition and Subtraction: Fact Families, Missing Addends, Making Ten

Multi-Digit Addition and Subtraction

- 5. Addition: Two- Three- and Four-Digit Numbers
- 6. Subtraction: Two- Three- and Four-Digit Numbers

Basic Multiplication and Division

- 7. Multiplication: Concepts and Factors to 10
- 8. Division: Concepts and Divisors to 10
- 9. Multiply & Divide: Word Problems, Missing Factors, Fact Families

Multi-Digit Multiplication and Division

- 10. Multiplication: One-Digit by Multi-Digit Factors
- 11. Multiplication: Multi-Digit Factors and Distributive Property
- 12. Division: Long Division with One-Digit Divisors
- 13. Division: Long Division with Two-Digit Divisors

Fractions

- 14. Fractions: Basic Concepts
- 15. Fractions: Representing Fractions on a Number Line
- 16. Fractions: Add and Subtract Like Denominators
- 17. Fractions: Multiply Fractions and Convert to Mixed Numbers
- 18. Fractions: Add and Subtract Unlike Denominators
- 19. Fractions: Divide and Simplify Fractions

Decimals

- 20. Decimals: Read, Write, Compare and Round
- 21. Decimals: Add and Subtract, Multiply and Divide
- 22. Decimals: Convert Between Percent, Decimals, and Fractions

Suggested Sequence

Supporting Resources

Number Sense & Place Value

- Numbers 0 to 20 Count, Read, & Write Numbers
- Numbers 1 to 120 Place Value & Number Sense Daily Practice
- Numbers 120 to 999 Place Value & Number Sense Daily Practice
- Hundreds: Expanded Form, Comparing, & Rounding Off
- Thousands: Expanded Form, Comparing, & Rounding Off

Fact Fluency

- Addition & Subtraction Timings, Flashcards & Games
- Multiplication & Division Timings, Flashcards & Games

Other

- Telling Time to the Nearest 5 Minutes
- Counting Money: Coins and Dollar Bills
- Shapes: Flat and Solid Practice Sheets

These resources may be used alone or with the computation lesson workbooks on the previous page.

Number sense and place value practice sheets are a great daily warm-up routine or entrance activity.

Fact fluency timings: Addition timings may be started after students can add sums to 10. Multiplication timings can begin after students have learned to multiply by 5's, 2's, and 3's.

Telling time and counting money may be taught any time after students are confident skip counting by 5's.

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FOR SPECIAL EDUCATION & INTERVENTION

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Feedback

I appreciate your feedback. I love to hear about your students' experiences and progress. You can contact me with comments or questions by emailing angela@mathtomastery.com. I do my best to provide error-free materials, but if you find a typo feel free to email and tell me so I can quickly correct it. Thank you for your support!

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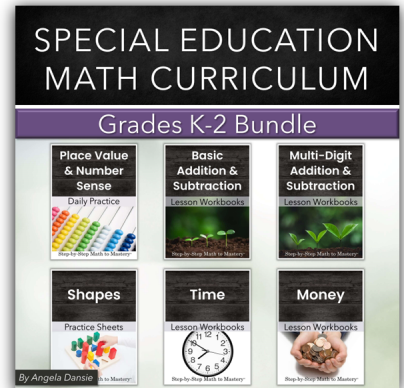
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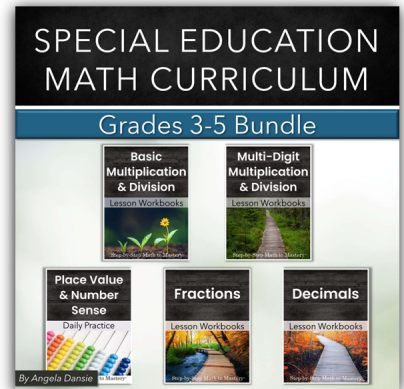
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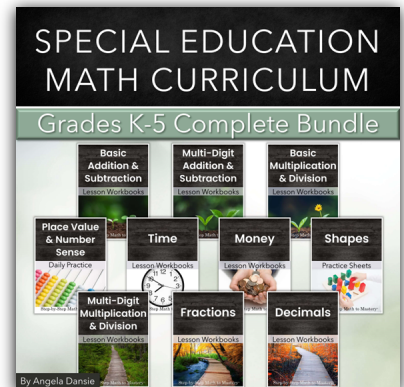
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For school district orders or large numbers of licenses, please see the product catalog or email me for a more personalized quote. angela@mathtomastery.com

Sample Lesson

In this sample you will see:

- Table of Contents
- Example IEP Goal & Objectives
- Overview & Suggestions for Use
- 4 Lessons
- Times Table Chart

A few things to notice as you look at the lesson . . .

Consistent & Predictable Format:

- “I Can” statements at the top of each page state lesson objective
- Model (I do), Guided Practice (We do), Independent Practice (You do)
- Uncluttered. White space and fewer problems on each page

Open and Teach. Paraeducator-Friendly.

- There is no separate lesson plan or teacher manual. The lesson workbook contains all that is needed for both the student and teacher.
- Steps to follow are printed next to each model. These written steps can be used to help the teacher “think out loud” while demonstrating.
- This makes it easy to give to a paraeducator to use. S/he doesn’t need a detailed script because the lessons are formatted to be predictable and simple. Once familiar with the format, adjustments can easily be made to the number of practice repetitions each student needs.

On some pages there may be quite a bit of text. Please realize that the written step-by-step instructions on each page are to help the teacher be clear and consistent during modeling and guided practice, not for the students to read and make sense of independently.

Step-by-Step Math to Mastery™

Multiplication: Concepts & Factors to 10

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Step-by-Step Math to Mastery™

Multiplication: Concepts & Factors to 10

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Multiplication: Concepts & Factors to 10

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Multiplication Concepts & Factors to 10 Standards & IEP Goal

Second Grade CCSS.MATH.CONTENT.2.OA.C.4

Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Third Grade CCSS.MATH.CONTENT.3.OA.A.1

Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .

Third Grade CCSS.MATH.CONTENT.3.OA.A.3

Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities

Third Grade CCSS.MATH.CONTENT.3.OA.B.5

Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.)

Third Grade CCSS.MATH.CONTENT.3.OA.C.7

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

IEP Goal Example:

By (month/year), when given single-digit multiplication problems, (student name) will write the answers with at least 85% accuracy across 3 consecutive trials. Progress will be monitored using classroom-based assessments every two weeks.

Objectives:

- Use multiplication to represent equal groups, repeated addition, arrays, grid area, and skip counting
- Write related multiplication facts to show the commutative property
- Multiply by 1 and 0
- Know when to add vs. when to multiply
- Use a times table chart
- Multiply by 5, 2, 3, 4, 10, 9, 6, 7, & 8 using the skip counting strategy

Step-by-Step Math to Mastery™

Multiplication Concepts & Factors to 10

Overview and Suggestions for Use:

Part 1 of this chapter introduces the concepts of multiplication and visualizing equal groups. It includes the use of repeated addition, arrays, grid area, skip counting, the commutative property, and the difference between addition and multiplication.

Part 2 addresses using skip counting to solve multiplication problems. It includes the vocabulary often used in word problems to signal multiplication. Lessons are sequenced to progress from the easiest patterns (counting by 2's and 5's) to the most difficult, so that by the time they get to 7's and 8's they only have a few new facts to learn. Related facts are introduced together.

Once students understand the concept of multiplication and have a firm strategy in place to tackle problems, they can focus on memorizing facts and building fluency.

“Why not skip to memorizing the facts? Wouldn't it be easier to skip the skip counting?” The time spent learning which numbers are associated with each series will pay off down the road when students learn division, and when they need to factor, find the lowest common multiple, or greatest common factor. It does require a lot of mental effort and many practice repetitions, but it is worth it!

Don't be afraid to take the time needed for students to master multiplication facts now so they won't need to remediate later and can instead focus on division, fractions, and decimals.

While researching strategies for these materials, I came across several that I did *not* include in the lessons. I want to mention some of them here, in case you are looking for a different way to approach multiplication facts for a certain student.

Multiplying by 4's: Teach that multiplying by 4 is the same as doubling a number and then doubling it again.

Multiplying by 9's: Teach the finger trick. Put hands in front of you, palms down and fingers spread. Imagine fingers are numbered 1-10 from left to right. If you are multiplying 9×3 you would bend down finger number 3 (middle finger of left hand). Count the fingers to the left of the tucked under finger (there are 2). Count the fingers on the right side of the bent finger (there are 7). The product of 9×3 is 27. This works when you multiply 9 by any number 1-10.

Step-by-Step Math to Mastery™

Multiplication Concepts & Factors to 10

Overview and Suggestions for Use:

Multiplying by 9's: Teach students the sum of 9 strategy. If you add the digits in the product, the sum always equals 9. For example, $9 \times 7 = 63$. $6 + 3 = 9$. So, first students see that one factor is 9. Next, they subtract 1 from the other factor and write that as the first digit of the product. Then they think, "What number do I need to add to it to make 9?" They write that number as the second digit of the product.

Rhyming Facts: $6 \times 6 = 36$; $6 \times 8 = 48$; 8 and 8 fell on the floor, when they got up they were 64

Number Pattern: Reverse $7 \times 8 = 56$ to be $56 = 7 \times 8$ so the numbers are in order "5, 6, 7, 8"

Skip counting songs are also popular. If you choose to use them, find some that are set to a familiar tune like these:

Skip Count by 3's to the tune of *Are You Sleeping, Brother John?*

3 6 9 12, 15 18, 21, 24, 27 30, 33 36, Threes are a cinch, Threes are a cinch!

Skip Count by 4's to the tune of *Where is Thumbkin?*

4 8 12, 16 20, 24, 28, 32 and 36, 40 and 44, 48 Isn't that great?

Skip Count by 6's to the tune of *Twinkle, Twinkle Little Star*

6 12 18 24, 30 and 36, 42 and 48, 54 and 60, 66 and 72, That is all I have to do.

Skip Count by 7's to the tune of *Sound Off Chant*

7, 14, 21, Count bys are a lot of fun, 28, 35, 42, I know my sevens how 'bout you?
49 (echo) 56 (echo) 63 (echo) 70, 77, 84 No more!

Skip Count by 7's to the tune of *If You're Happy and You Know It, Clap Your Hands*

7, 14, 21 these are the sevens (clap, clap) 28 and 35 these are the sevens (clap, clap)
42 and 49, 56 and 63, 70 and 77, these are the sevens (then shout) 84!

Skip Count by 8's to the tune of *Row, Row, Row Your Boat*

8 16 24, 32 40, 48 and 56, 64 you see. 72 and 80, 88 96
The eights are all done now, That was pretty quick.

— Step-by-Step —

Math to Mastery Lesson Workbook

Multiply

- Equal Groups
- Repeated Addition
- Area Grid
- Skip Counting
- Commutative Property
- Multiply by One
- Multiply by Zero
- Multiply vs. Add
- Times Table Charts

Name _____

SAMPLE

Name _____

I Can Use Multiplication to Describe an Array

Model:

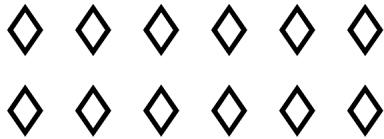
1 ♥ ♥ ♥ ♥
 2 ♥ ♥ ♥ ♥
 3 ♥ ♥ ♥ ♥
 4 ♥ ♥ ♥ ♥
 5 ♥ ♥ ♥ ♥
 6 ♥ ♥ ♥ ♥
 1 2 3 4

6 rows, 4 in each row
6 × 4 hearts = 24

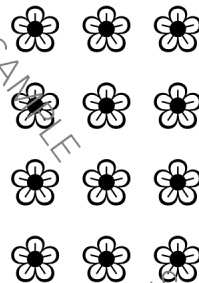
An array is a group of objects organized into rows and columns. Today you will use multiplication to show how many are in the array.

1. Point to the object in the top left corner. Count the rows and write the number in the first blank.
2. Point to the object in the bottom left corner. Count the columns and write the number in the next blank.
3. To write the multiplication equation, write the number of rows in the first blank, *times* the number in each row in the second blank.
4. Count the pictures to find the total.

Guided Practice:



_____ rows, _____ in each row
 _____ × _____ diamonds = _____



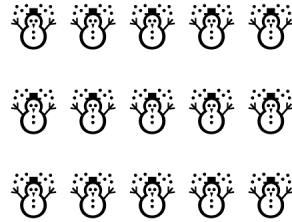
_____ rows, _____ in each row
 _____ × _____ flowers = _____

I Can Use Multiplication to Describe an Array

Independent Practice:

- Point to the object in the top left corner. Count the rows and write the number in the first blank.
- Point to the object in the bottom left corner. Count the columns and write the number in the next blank.
- To write the multiplication equation, write the number of rows in the first blank, *times* the number in each row in the second blank.
- Count the pictures to find the total.

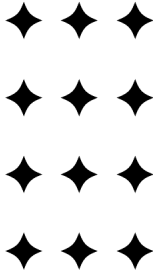
a.



_____ rows, _____ in each row

_____ × _____ snowmen = _____

b.



_____ rows, _____ in each row

_____ × _____ diamonds = _____

c.



_____ rows, _____ in each row

_____ × _____ hearts = _____

d.



_____ rows, _____ in each row

_____ × _____ stars = _____

e.



_____ rows, _____ in each row

_____ × _____ airplanes = _____

SAMPLE

Name _____

I Can Write a Related Multiplication Fact

Model:

$$\begin{array}{r}
 6 \\
 \times 3 \\
 \hline
 18 \\
 \uparrow \\
 \text{Product}
 \end{array}$$

} Factors

Factors are the numbers you multiply.
 The *Product* is the answer to a multiplication problem.
 When you multiply, the order of the factors does not matter.
 If you switch the order of the factors, the product is still the same.
 Today you will write a related multiplication fact.
 1. Switch the order of the factors.
 2. Keep the product below the equal line.

$$\begin{array}{r}
 3 \\
 \times 2 \\
 \hline
 6
 \end{array}
 \quad
 \begin{array}{|c|}
 \hline
 2 \\
 \hline
 3 \\
 \hline
 6 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 3 \\
 \times 5 \\
 \hline
 15
 \end{array}
 \quad
 \begin{array}{|c|}
 \hline
 5 \\
 \hline
 3 \\
 \hline
 15 \\
 \hline
 \end{array}$$

Guided Practice:

$$\begin{array}{r}
 2 \\
 \times 4 \\
 \hline
 8
 \end{array}
 \quad
 \begin{array}{|c|}
 \hline
 \\
 \hline
 \\
 \hline
 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 4 \\
 \times 5 \\
 \hline
 20
 \end{array}
 \quad
 \begin{array}{|c|}
 \hline
 \\
 \hline
 \\
 \hline
 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 1 \\
 \times 3 \\
 \hline
 3
 \end{array}
 \quad
 \begin{array}{|c|}
 \hline
 \\
 \hline
 \\
 \hline
 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 2 \\
 \times 6 \\
 \hline
 12
 \end{array}
 \quad
 \begin{array}{|c|}
 \hline
 \\
 \hline
 \\
 \hline
 \\
 \hline
 \end{array}$$

SAMPLE

Name _____

I Can Write a Related Multiplication Fact

Independent Practice:

$$\begin{array}{r} \text{SAMPLE} \\ \times 2 \\ \times 5 \\ \hline 10 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline 12 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 4 \\ \hline 4 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 3 \\ \hline 15 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 7 \\ \hline 14 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 2 \\ \hline 16 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 6 \\ \hline 24 \end{array}$$

$$\begin{array}{|c|} \times \\ \hline \\ \times \\ \hline \\ \times \\ \hline \end{array}$$

SAMPLE

Name _____

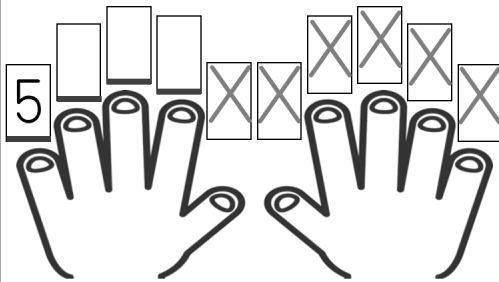
I Can Multiply by 5

Warm Up: Skip Count by 5's to 50

1. With number line or hundred chart *if needed*
2. Without any visuals
3. Round robin: each student takes a turn saying a number in the series
4. With fingers (hold up fingers, touch and count):
 "Count by 5's 4 times and stop." "Count by 5's 2 times and stop."

Model:

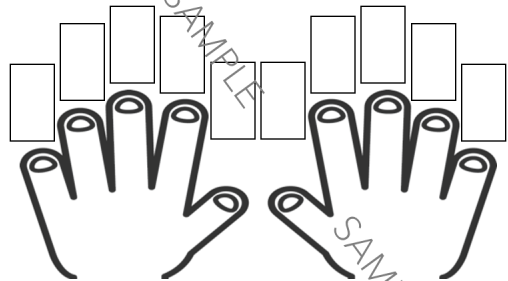
$$\textcircled{5} \times \underline{4} = \underline{\quad}$$



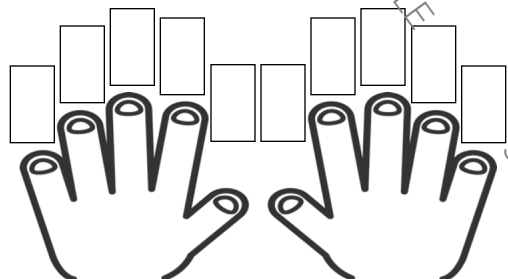
1. Look at the sign. We are multiplying.
Think: "The times symbol means count by"
2. Look at the factors. Which one is easier to count by? (five)
3. Circle the factor you want to count by.
4. Write it in the first box, above the hands.
5. Underline the other factor. Think: "I will count 4 times so I need 4 fingers."
6. Cross out the extra fingers in the picture.
(Do not solve today, we will add more steps in the next lesson.)

Guided Practice:

$$3 \times 5 = \underline{\quad}$$



$$5 \times 2 = \underline{\quad}$$



SAMPLE

Name _____

I Can Multiply by 5

Independent Practice:

Steps:

- Look at the sign. We are multiplying.
Think: "The times symbol means count by"
- Look at the factors. Which one is easier to count by?
- Circle the factor you want to count by.
- Write it in the first box, above the hands.
- Underline the other factor. Think: "I will count ___ times so I need ___ fingers."
- Cross out the extra fingers in the picture.

a.

$5 \times 4 = \underline{\quad}$

b.

$3 \times 5 = \underline{\quad}$

c.

$5 \times 2 = \underline{\quad}$

d.

$5 \times 5 = \underline{\quad}$

e.

$4 \times 5 = \underline{\quad}$

SAMPLE

Name _____

I Can Multiply to Solve Word Problems

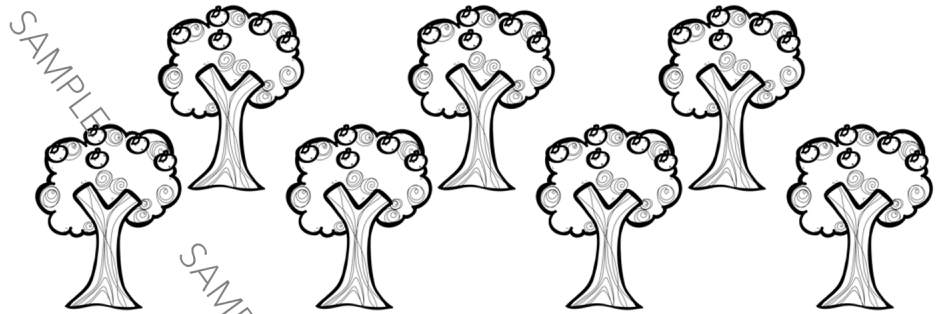
Vocabulary:

Watch for the word "each". It often means you need to multiply.

Model:

There are 7 trees in the orchard. Each tree has 5 apples. How many apples are there altogether?

$$\begin{array}{r} 7 \\ \times 5 \\ \hline 35 \end{array}$$



Guided Practice:

There are 5 trees in the orchard. Each tree has 8 apples. How many apples are there total?

$$\begin{array}{r} \square \\ \times \square \\ \hline \square \end{array}$$

There are 6 pear trees in the orchard. Each pear tree has 2 pears. How many pears are there altogether?

$$\begin{array}{r} \square \\ \times \square \\ \hline \square \end{array}$$

There are 2 apricot trees in my yard. Each tree has 8 apricots. How many apricots are there in all?

$$\begin{array}{r} \square \\ \times \square \\ \hline \square \end{array}$$

There are 9 lemon trees. Each tree has 5 lemons. How many lemons are there total?

$$\begin{array}{r} \square \\ \times \square \\ \hline \square \end{array}$$

SAMPLE

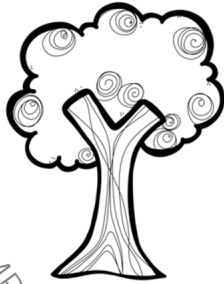
Name _____

I Can Multiply to Solve Word Problems

Independent Practice:

The fruit is ripe!

Find out how many pieces of fruit need to be picked.



a.

There are 2 fig trees. Each fig tree has 3 figs. How many are there altogether?

X	

b.

There are 5 lime trees. Each one has 4 limes on it. How many limes are there in all?

X	

c.

4 plum trees grow in the orchard. Each tree has 2 plums. How many plums are there total?

X	

d.

6 orange trees are in the orchard. Each tree has 5 oranges. How many oranges are there?

X	

e.

There are 2 cherry trees growing. Each tree has 7 cherries. How many cherries are there?

X	

f.

There are 5 olive trees. Each olive tree has 2 olives on it. How many olives are there altogether?

X	

g.

9 pear trees grow in the orchard. Each one has 2 pears on it. How many pears are there in all?

X	

Name _____

Times Table A x2

x	0	1	2	3	4	5	6	7	8	9	10
0			0								
1			2								
2	0	2	4	6	8	10	12	14	16	18	20
3			6								
4			8								
5			10								
6			12								
7			14								
8			16								
9			18								
10			20								

Use the multiplication chart to write the products. Write two more "x 2" equations.

$2 \times 0 = \underline{\quad}$

$6 \times 2 = \underline{\quad}$

$10 \times 2 = \underline{\quad}$

$2 \times 2 = \underline{\quad}$

$2 \times 1 = \underline{\quad}$

$2 \times 7 = \underline{\quad}$

$2 \times 4 = \underline{\quad}$

$3 \times 2 = \underline{\quad}$

$2 \times 8 = \underline{\quad}$

$7 \times 2 = \underline{\quad}$

$2 \times 5 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$2 \times 9 = \underline{\quad}$

$8 \times 2 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$