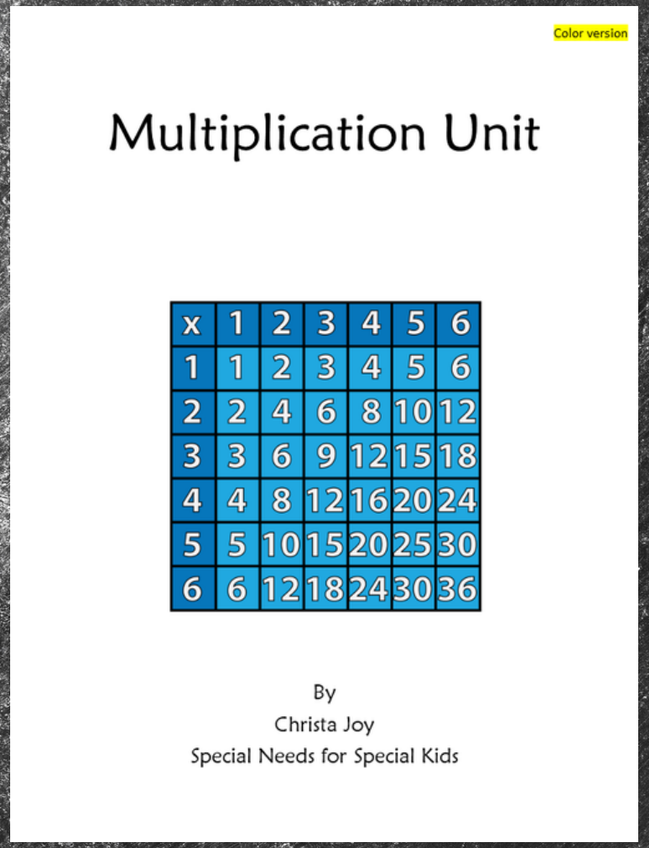
MULTIPLICATION

Special Ed

ALSO INCLUDES GOOGLE SLIDES

This unit was created with this guy in mind. He has autism and an intellectual disability. He is a non-reader and lacks many pre-requisite math skills needed for math. With some support, he is able to do this unit and enjoys the challenge. He is my tester!!



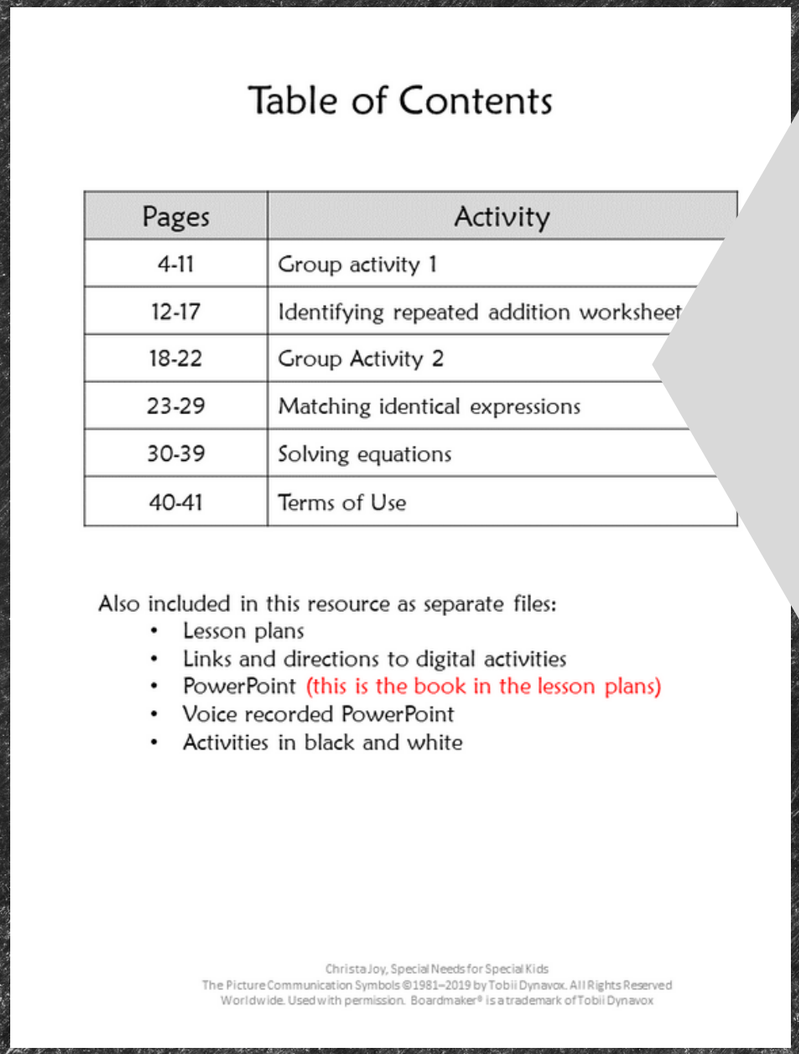


Table of Contents

Pages	Activity
4-11	Group activity 1
12-17	Identifying repeated addition worksheet
18-22	Group Activity 2
23-29	Matching identical expressions
30-39	Solving equations
40-41	Terms of Use

Also included in this resource as separate files:

- Lesson plans
- Links and directions to digital activities
- PowerPoint (this is the book in the lesson plans)
- Voice recorded PowerPoint
- Activities in black and white

Christa Joy, Special Needs for Special Kids
The Picture Communication Symbols ©1981–2019 by Tobii Dynavox. All Rights Reserved Worldwide. Used with permission. Boardmaker® is a trademark of Tobii Dynavox

This unit contains over 50 pages of material. But, don't worry!! I have included an 8 day lesson plan to help you make the most of everything in this unit.

This unit comes in 2 files, one in color and one in black and white.

Multiplication Lesson Plan

Preparation

- Book
  - Print out, laminate, and bind
  - OR your students can listen to the pre-recorded version
  - I highly recommend using the movie version of the book (see direction for digital activities for link) since it is animated and narrated
- Group activities
  - Print out cards and laminate for activities

Teaching Tips

1. *Color Coding*: this is a really easy way to add more structure to a matching activity. The color version of the activities have some color-coding added for students who need more support.
   a. For more info, read more here: https://specialneedsforspecialkids.org/2015/09/05/using-color-coding-for-differentiation/
   b. I also have a blog post on differentiating one activity 3 ways: https://specialneedsforspecialkids.org/2018/10/22/differentiating-1-activity-3-ways-easily-and-effectively/
2. *Make you own copies of the activities*: Every day I review the activity we did yesterday. For that reason:
   a. I often complete the activity myself and often laminated it for easy review that I could use year after year.
   b. My copies were also helpful as either a model for students who needed more support or as a way for more advanced students to self-check their work.
3. *Worksheets*
   a. There may be more worksheets included than you need.
   b. For students who need more support, try using the worksheet with color-coding one day and the one without color-coding the next day

The lesson plans contain:

Overall tips for teaching students with significant needs and who may lack some pre-requisite skills.

Quick Look

Day	Activity	Day	Activity
1	• Book • Group activity 1 • Repeated addition worksheet	6	• Book • Solving equations
2	• Book • Group activity 1 • Repeated addition worksheet	7	• Book • Solving equations
3	• Book • Group activity 2 • Matching equivalent expressions	8	• Book • Solving equations
4	• Book • Group activity 2 • Matching equivalent expressions		
5	• Book • Group activity 2 • Matching equivalent expressions		

The lesson plans contain:

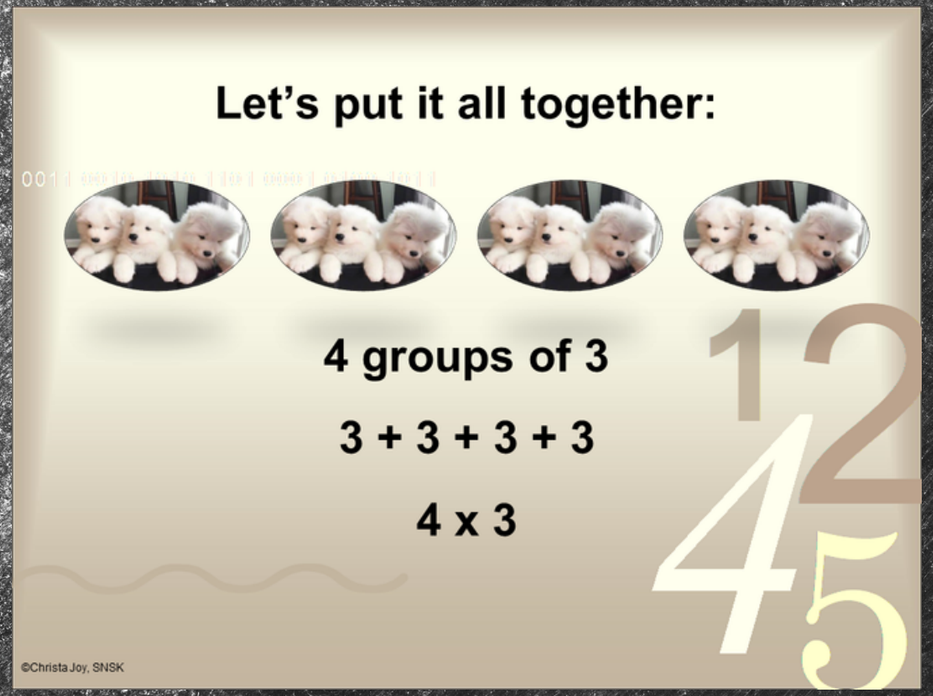
A *quick* look at what you will do *each* day.

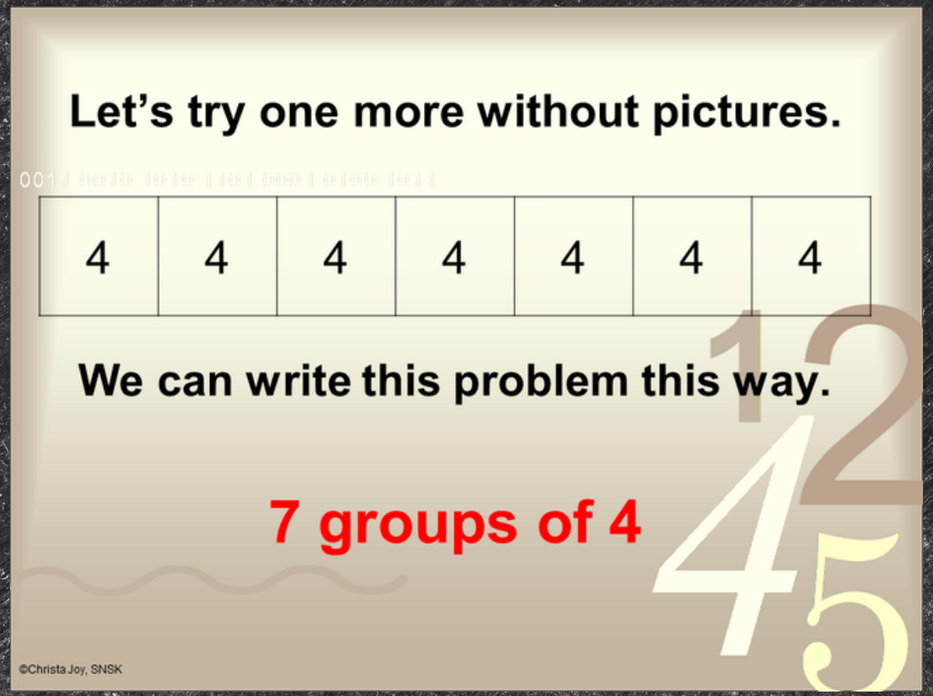
Day 3-5

Activity	Notes	Materials
Read or listen to the movie version of the book (5 minutes)	• Read through the story, asking lots of questions • Continue to make connections between book and previous knowledge	• Book
Group Activity 2 (15 minutes)	• See activity for ideas on different ways to play this game	• Activity cards
Review matching equivalent expressions worksheet (5 minutes)	• Review the worksheet completed yesterday	• Equivalent expressions worksheet
Match equivalent expressions (10 minutes)	• Do one of the worksheets drawing a line to the equivalent expression • There is a differentiated version included with dashed lines to trace if needed • See worksheet for suggestions on different ways to complete these worksheets • If students use differentiated worksheets, see if they are able to complete the same worksheet without the differentiation • *Students are not solving the problems*	• Worksheet • Pencils
Sharing (10 minutes)	• Each student shares one of their finished worksheets with the group using the communication method of their choice	• Completed worksheets • Communication devices

The lesson plans contain:

Detailed instructions on how that day's lesson should run including group and individual activities.





This unit contains a book that is 20 pages and covers what it means to multiply numbers.

It comes in a PowerPoint version as well as an mp4 version that is animated and narrated.

Group Activity 1: Identify Repeated Addition

- Do this as a group activity.
- Print cards and laminate.
- Variations:
  - Yes/no
    - Give each student a yes/no card.
    - Hold up a card and have students decide if it is or is not an example of repeated addition.
  - Sorting
    - Give each student a set of cards to sort into this that are and are not examples of repeated addition.
  - Speed matching
    - Place a stack of cards in the middle of the table.
    - Give clues:
      - Find a card with repeated addition using the number 4
      - Find a card that does not use repeated addition
    - Students race to find correct card.
  - Bean bag toss
    - Tape cards on to paper plates and set around the room.
    - Students try to toss a bean bag onto the plates with repeated addition.
  - Scavenger hunt
    - Place cards around the room and students have to find the cards with repeated addition.
- To differentiate, highlight the number that are the same in each expression

4 + 4 + 4 + 4	1 + 2 + 3 + 4
4 + 4 + 5 + 4	1 + 1 + 1 + 1
1 + 2 + 1 + 3	3 + 6 + 9 + 12
2 + 2 + 2 + 2	3 + 3 + 3 + 3

There are 2 group activities. The first one has students practice identifying examples of repeated addition.

There are several different variations on how to do this group activity to keep students engaged.

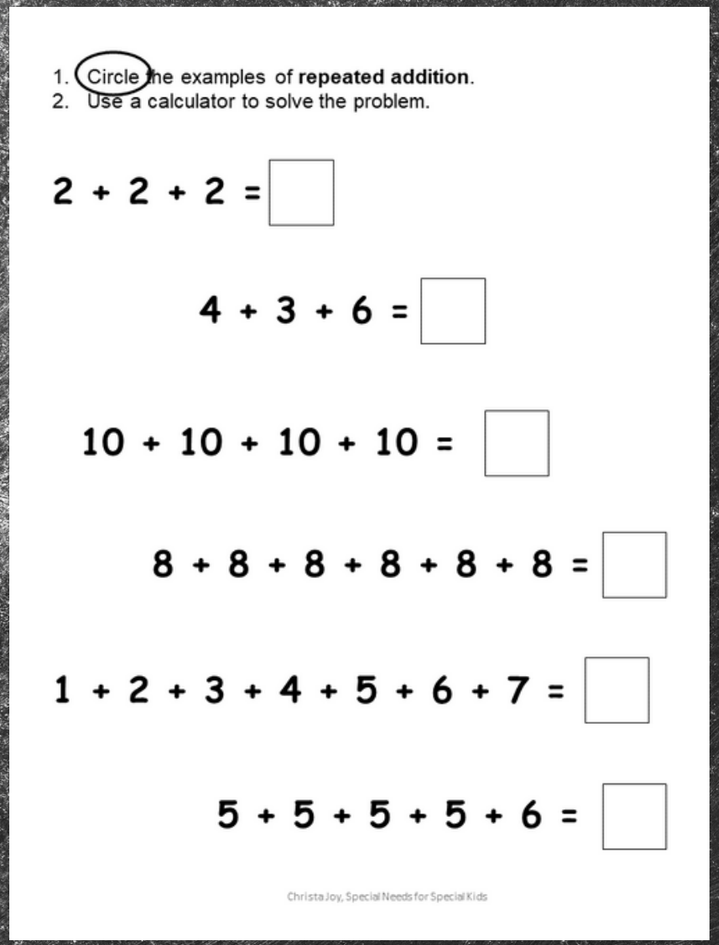
Group Activity 2: Find Matching Sets

- Do this as a group activity.
- Print cards and laminate.
- Students will find all four cards that have the same meaning or value, for example:
  1. | 5 | 5 | 5 |
  2. 3 groups of 5
  3. 5 + 5 + 5
  4. 3 x 5
- To differentiate, outline each set in a different color
- Options:
  - Rather than find all 4 in the group, give students decrease the options to 3 in a group
  - Give students pairs of cards to match

5 5 5 5 5 5	6 groups of 5
5 + 5 + 5 + 5 + 5 + 5	6 x 5
8 8 8 8 8 8	6 groups of 8
8 + 8 + 8 + 8 + 8 + 8	6 x 8

The second group activity has students practice finding equivalent expressions.

Again, there are several different variations on how to do this group activity to keep students engaged.


1. Circle the examples of **repeated addition**.
2. Use a calculator to solve the problem.

2 + 2 + 2 = ☐

4 + 3 + 6 = ☐

10 + 10 + 10 + 10 = ☐

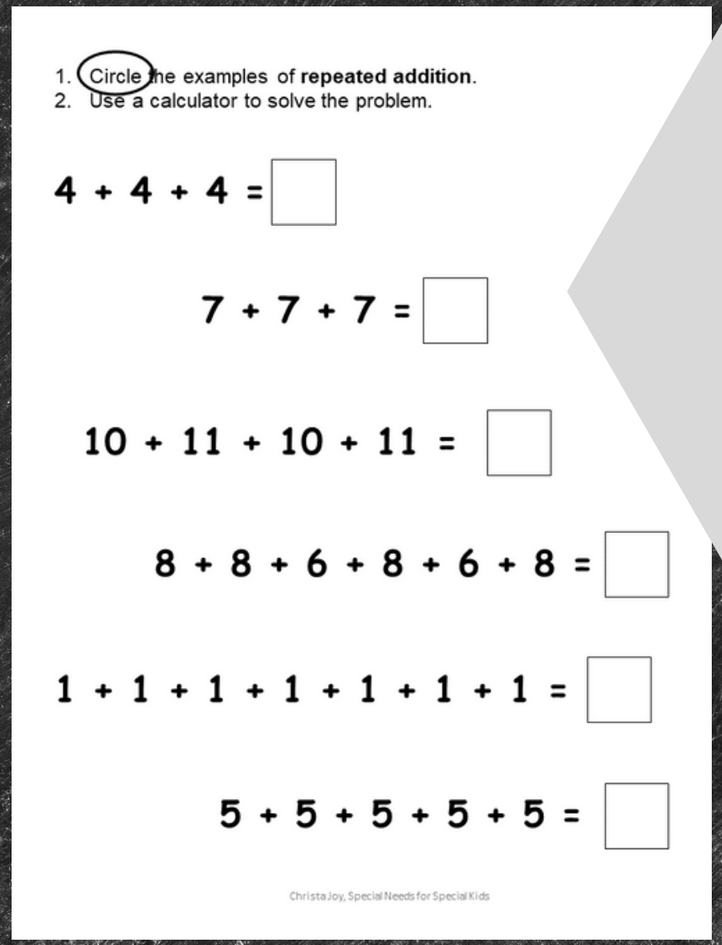
8 + 8 + 8 + 8 + 8 + 8 = ☐

1 + 2 + 3 + 4 + 5 + 6 + 7 = ☐

5 + 5 + 5 + 5 + 6 = ☐

Christa Joy, Special Needs for Special Kids

5 worksheets


1. Circle the examples of **repeated addition**.
2. Use a calculator to solve the problem.

4 + 4 + 4 = ☐

7 + 7 + 7 = ☐

10 + 11 + 10 + 11 = ☐

8 + 8 + 6 + 8 + 6 + 8 = ☐

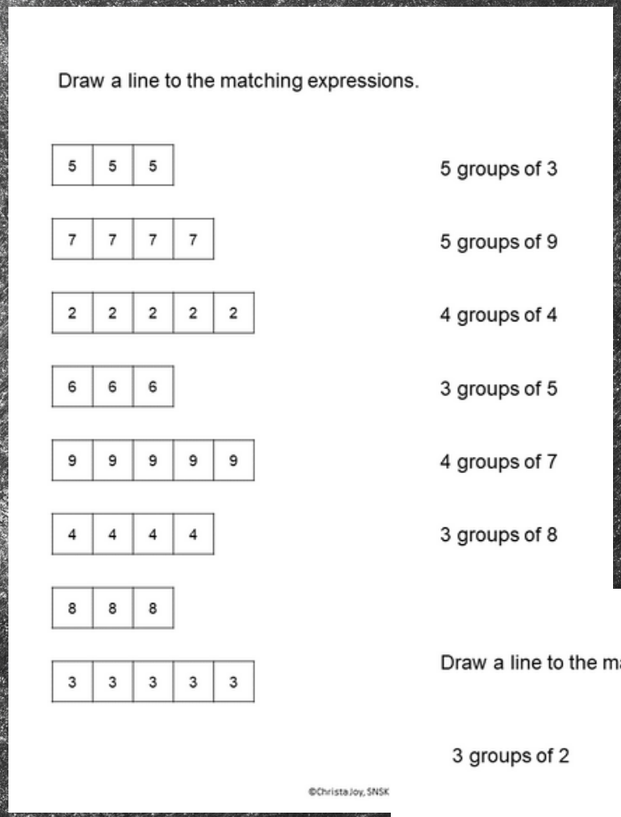
1 + 1 + 1 + 1 + 1 + 1 + 1 = ☐

5 + 5 + 5 + 5 + 5 = ☐

Christa Joy, Special Needs for Special Kids

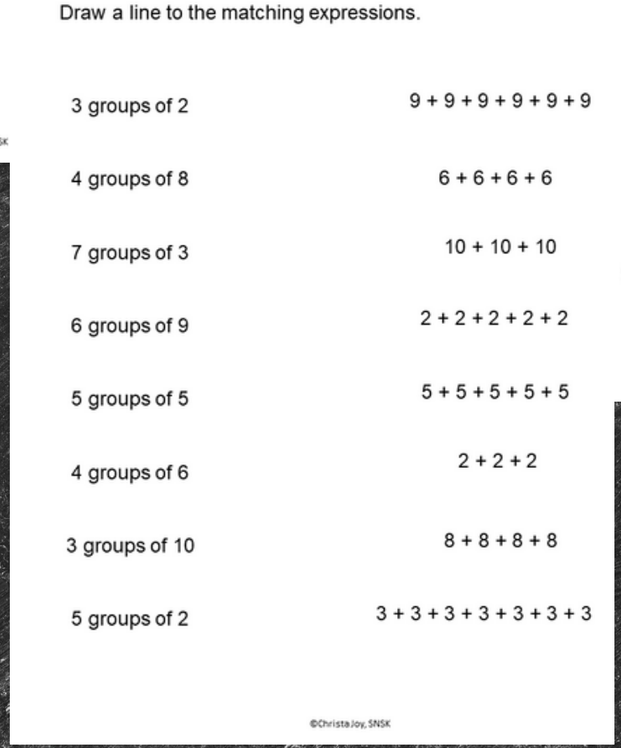
There are 3 worksheet sets. The first one has students practice finding examples of repeated addition.

3 worksheets


Draw a line to the matching expressions.

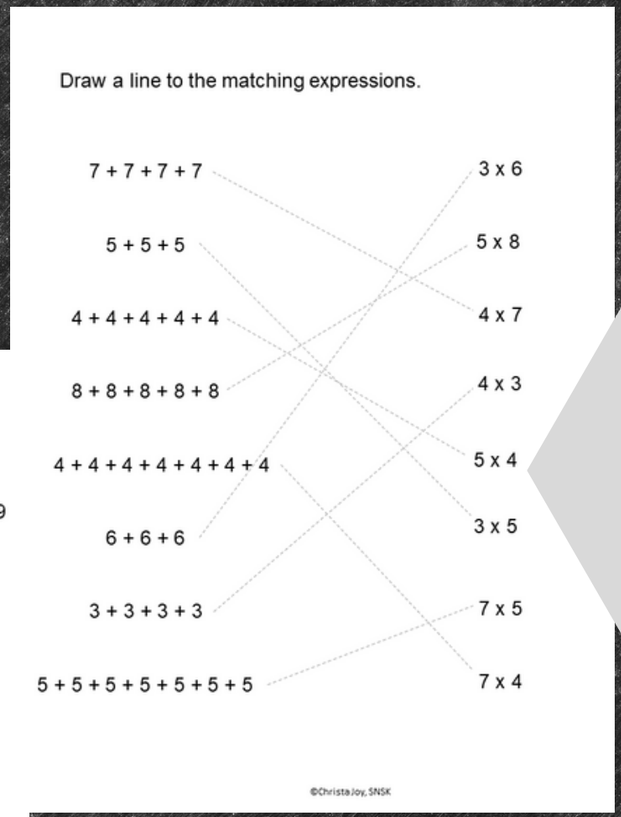
5 5 5	5 groups of 3
7 7 7 7	5 groups of 9
2 2 2 2 2	4 groups of 4
6 6 6	3 groups of 5
9 9 9 9 9	4 groups of 7
4 4 4 4	3 groups of 8
8 8 8	
3 3 3 3 3	

©Christa Joy, SNSK


Draw a line to the matching expressions.

3 groups of 2	9 + 9 + 9 + 9 + 9 + 9
4 groups of 8	6 + 6 + 6 + 6
7 groups of 3	10 + 10 + 10
6 groups of 9	2 + 2 + 2 + 2 + 2
5 groups of 5	5 + 5 + 5 + 5 + 5
4 groups of 6	2 + 2 + 2
3 groups of 10	8 + 8 + 8 + 8
5 groups of 2	3 + 3 + 3 + 3 + 3 + 3 + 3

©Christa Joy, SNSK

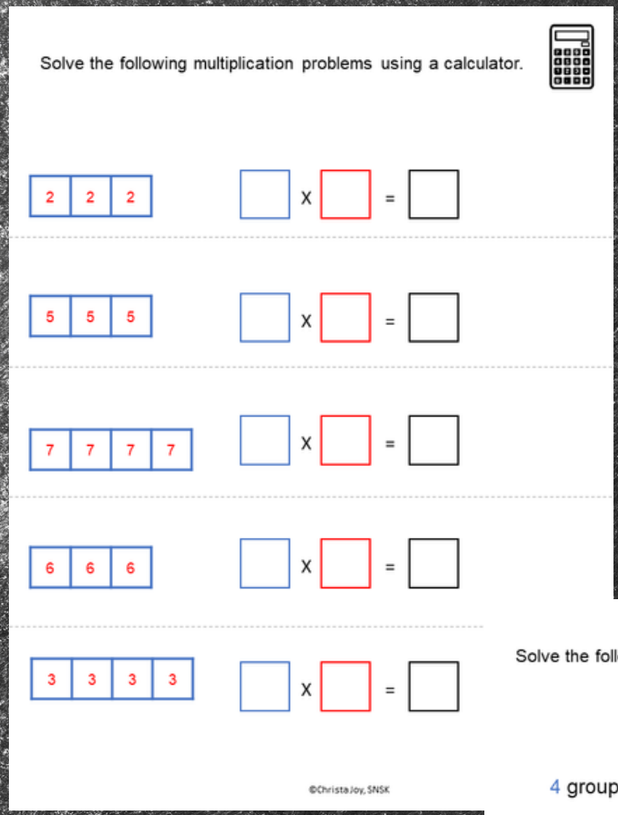

Draw a line to the matching expressions.

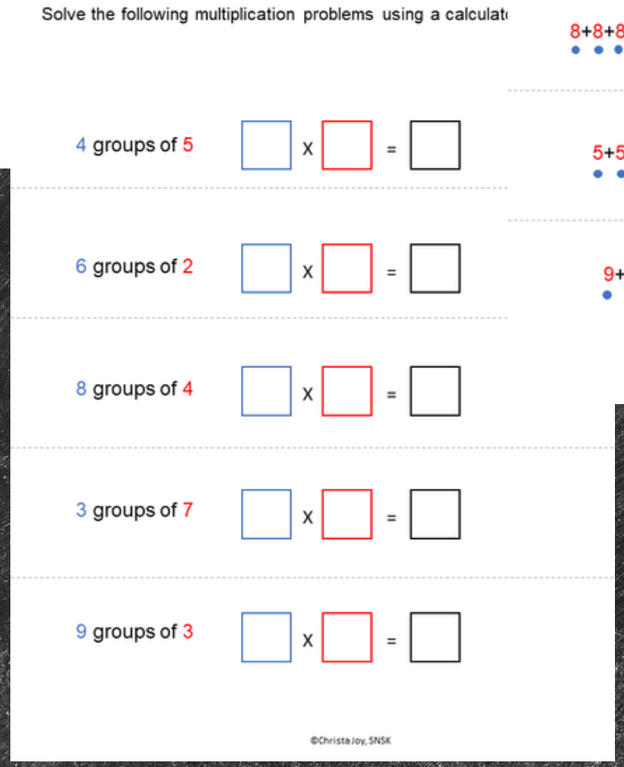
7 + 7 + 7 + 7	3 x 6
5 + 5 + 5	5 x 8
4 + 4 + 4 + 4 + 4 + 4	4 x 7
8 + 8 + 8 + 8 + 8	4 x 3
4 + 4 + 4 + 4 + 4 + 4 + 4 + 4	5 x 4
6 + 6 + 6	3 x 5
3 + 3 + 3 + 3	7 x 5
5 + 5 + 5 + 5 + 5 + 5 + 5 + 5	7 x 4

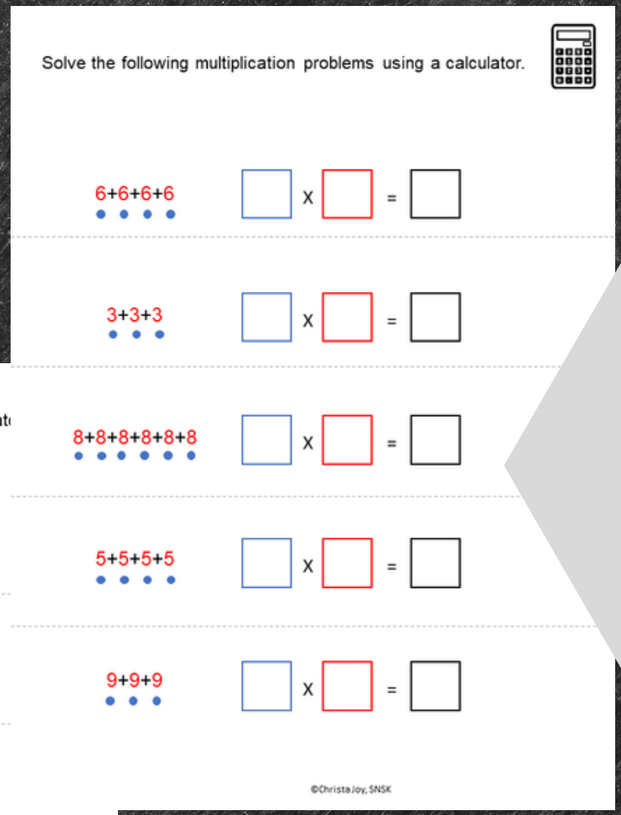
©Christa Joy, SNSK

The second set has students practice finding equivalent expressions. There are differentiated versions with lines for students to trace.

6 worksheets



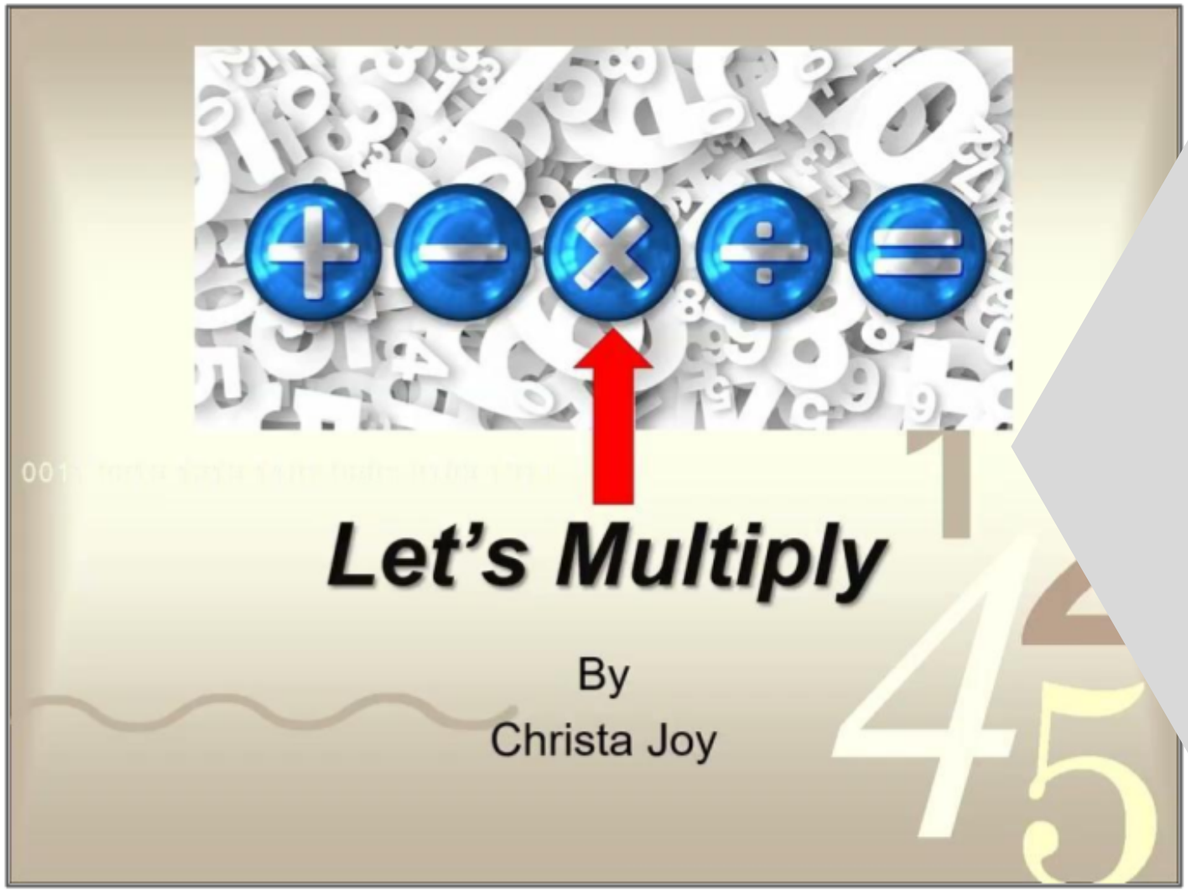




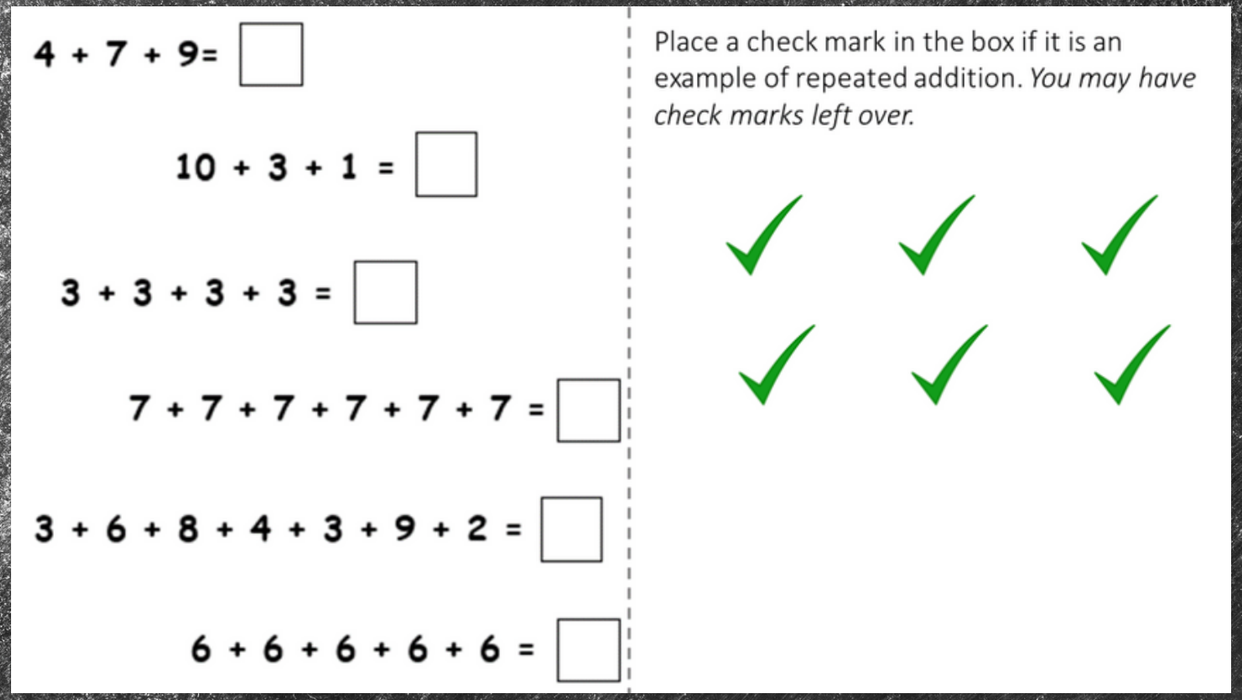
The third set has students translate expressions and finally solve the multiplication problem with a calculator. There are differentiated versions included using color for students who need more support (shown here).

Please note, that this unit does not include a formal assessment or fill-in-the-blank worksheets often found in my other units.

Watch the movie on multiplication.



This unit includes digital activities. Part of that is a movie version of the book you can play in a google slide. This movie is animated and narrated.



4 + 7 + 9= ☐

10 + 3 + 1 = ☐

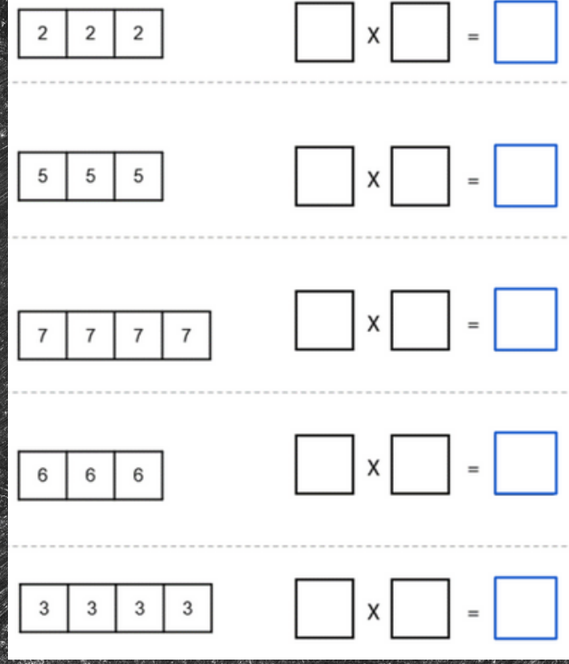
3 + 3 + 3 + 3 = ☐

7 + 7 + 7 + 7 + 7 + 7 = ☐

3 + 6 + 8 + 4 + 3 + 9 + 2 = ☐

6 + 6 + 6 + 6 + 6 = ☐

Place a check mark in the box if it is an example of repeated addition. *You may have check marks left over.*



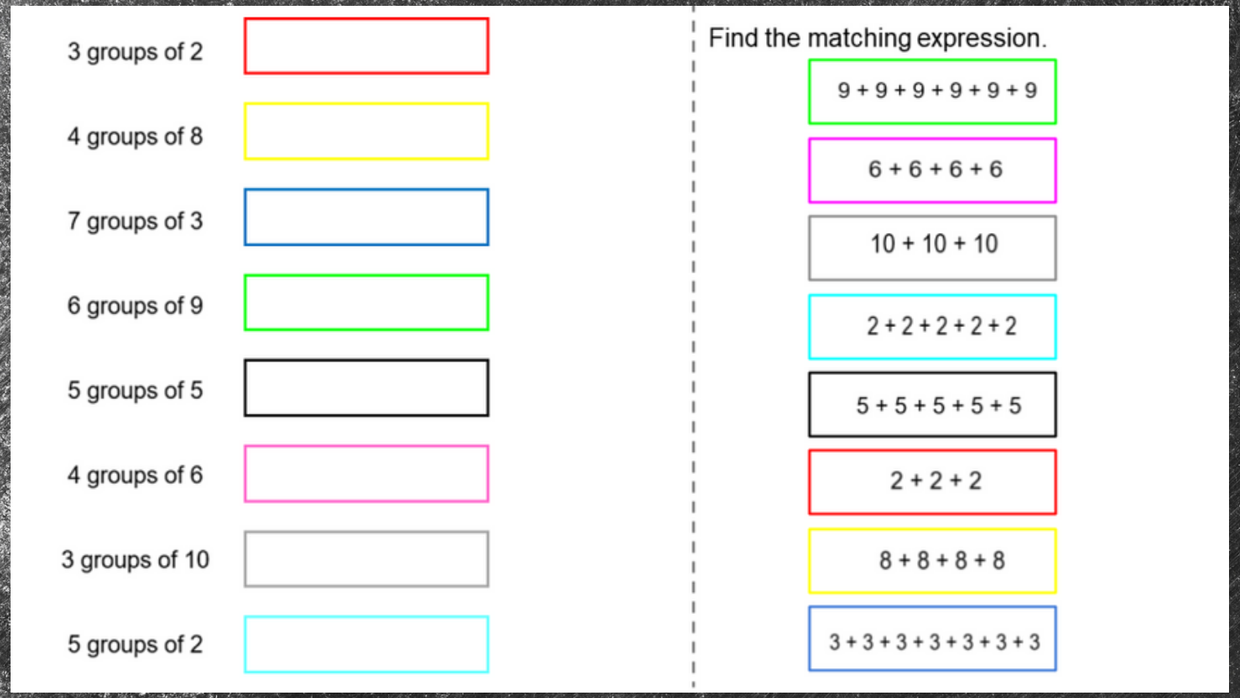
2	2	2	☐	x ☐	=	☐
5	5	5	☐	x ☐	=	☐
7	7	7	7	☐	x ☐	= ☐
6	6	6	☐	x ☐	=	☐
3	3	3	3	☐	x ☐	= ☐

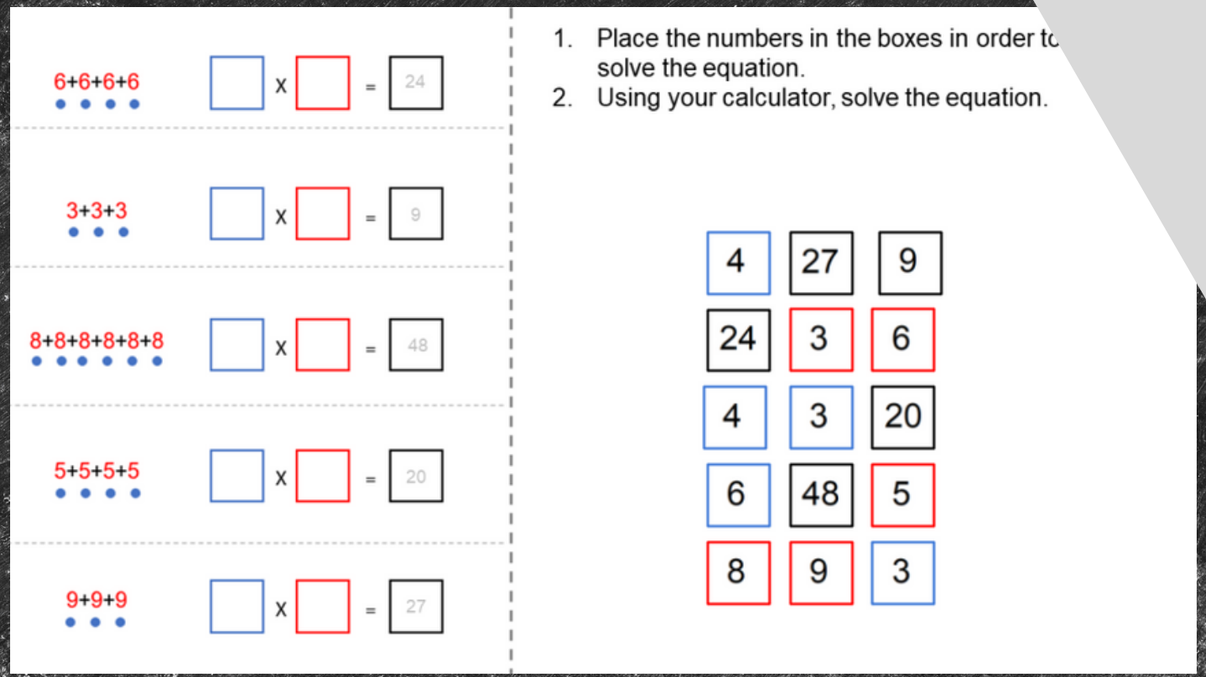
1. Place the numbers in the boxes in order to solve the equation.
2. Using your calculator, solve the equation. Type the answer in the blue box.

3	4
7	5
3	2
4	3
3	6

There are 2 sets of google slides that include half of each set of worksheets in the unit.

Students can type in the answers on the final set where they are solving the problems.





One set is differentiated with color for students who need more support. In this set, students are NOT typing but clicking and dragging over their answers.

This resource comes in a zipped folder. You will need to unzip the folder to access all the contents which include:

- 8 days of lesson plans
- Multiplication activities in color
- Multiplication activities in black and white
- Voice-recorded PowerPoint show
- Multiplication book (PowerPoint) to use with activities
- Links and directions to digital activities