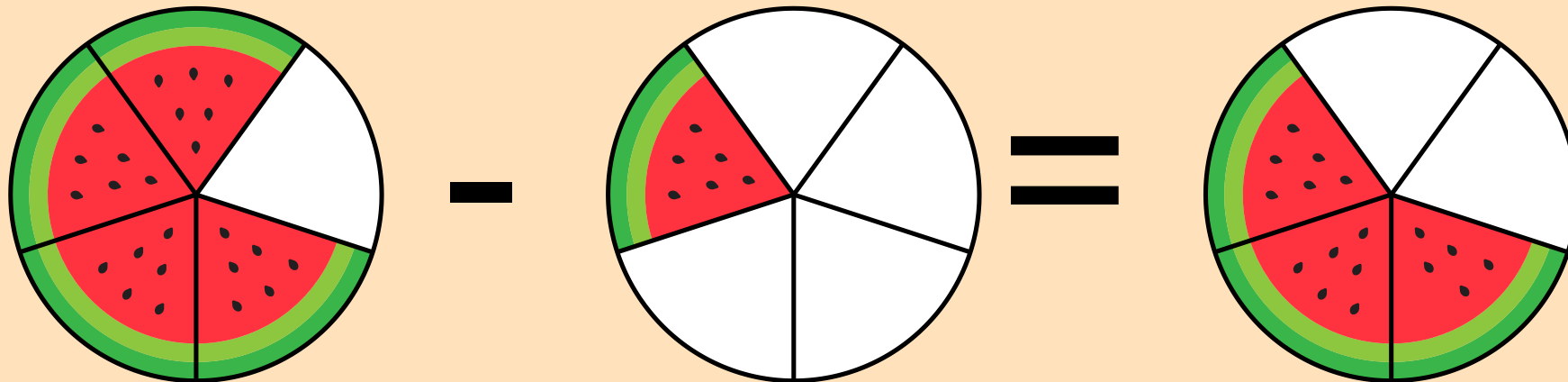
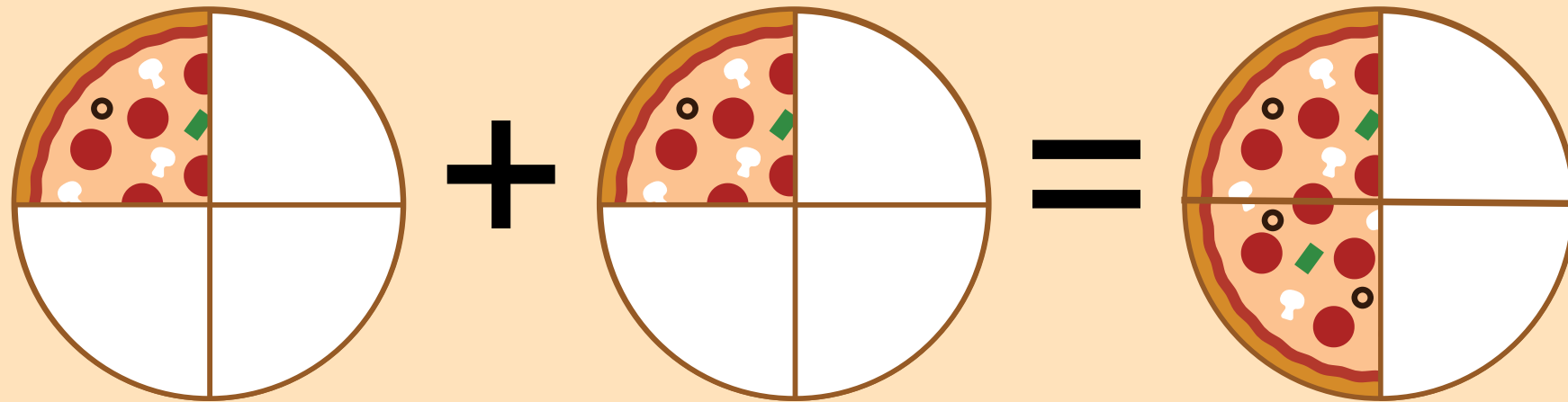


# ADDING & SUBTRACTING FRACTIONS

WITH MODELS

With  
same  
denominators



MAKING MATH ACCESSIBLE TO ALL LEARNERS



For students who:

- are emerging or non-readers
- take alternate assessments
- are in special education
- short-attention span
- lack pre-requisite skills
- benefit from the use of pictures for support

## Table of Contents

Worksheet pages	Activity
4-5	Vocabulary board
6-20	Bingo cards
21-38	Hands on activities
39-52	Worksheet set 1: subtract with models
53-66	Worksheet set 2: subtract with models and write fractions
67-69	Quiz
70-71	Terms of use

In a separate files:

- Lesson plans
- Directions and links to digital version of the activities
- Subtracting Fractions book (PowerPoint)
- Activities in black and white

Each unit contains 9 days of material in print and digital formats. I have included detailed lesson plans to help you make the most of everything in these units, including adding some group activities.

These units come in 2 separate files, one in color and one in black and white.

# Each Unit Has:

2 weeks of Lesson Plans

13-Slide PowerPoint & MP4 Video

Bingo & Fraction Cards

 Group Activities

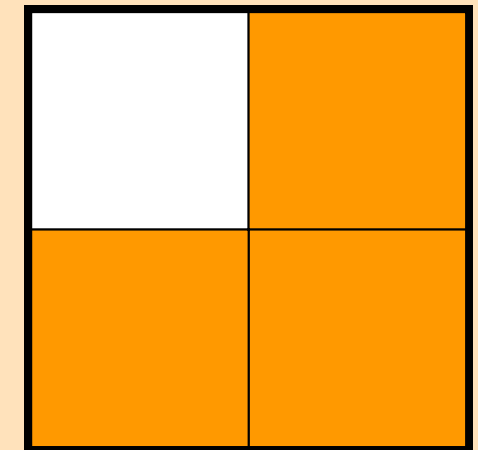
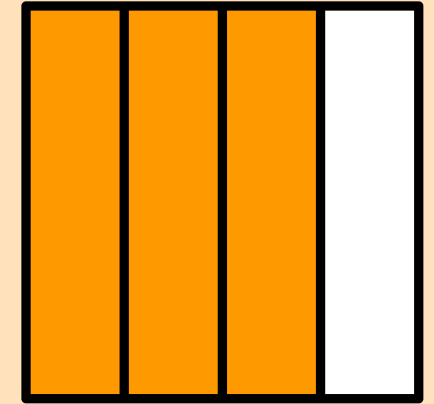
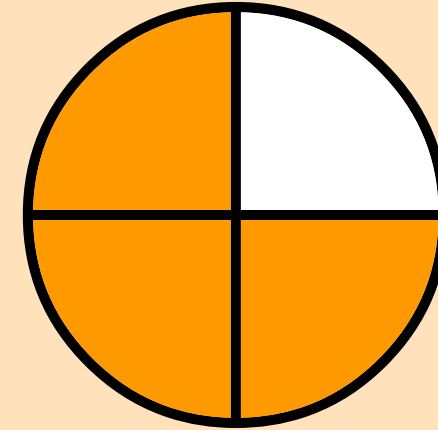
Worksheets:

Add or subtract using models

Add or subtract, including writing in fraction values

Quiz

Digital Activities



# Lesson Plan

The **lesson plans** contain:

- Overall tips for teaching students with significant needs
- A quick look at what you will do each day
- Detailed instructions on how that day's lesson should run

Quick Look

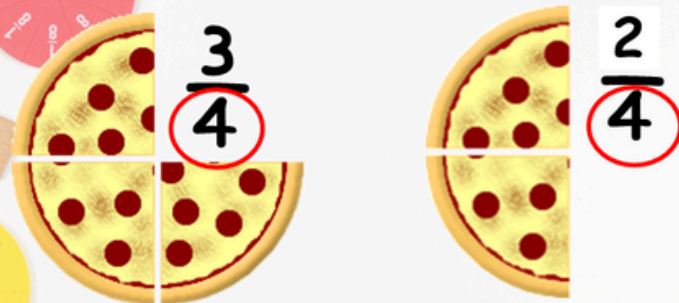
Day	Activity	Day	Activity
1	<ul style="list-style-type: none"> <li>• Book</li> <li>• Vocabulary board intro</li> <li>• Group activity</li> <li>• Worksheet set #1</li> </ul>	6	<ul style="list-style-type: none"> <li>• Book</li> <li>• Group activity</li> <li>• Worksheet set #2</li> </ul>
2	<ul style="list-style-type: none"> <li>• Book</li> <li>• Group activity</li> <li>• Worksheet set #1</li> </ul>	7	<ul style="list-style-type: none"> <li>• Book</li> <li>• Group activity</li> <li>• Worksheet set #2 (cut and paste)</li> </ul>
3	<ul style="list-style-type: none"> <li>• Book</li> <li>• Group activity</li> <li>• Worksheet set #1 (cut and paste)</li> </ul>	8	<ul style="list-style-type: none"> <li>• Book</li> <li>• Group activity</li> <li>• Worksheet set #2 (cut and paste)</li> </ul>
4	<ul style="list-style-type: none"> <li>• Book</li> <li>• Group activity</li> <li>• Worksheet set #1 (cut and paste)</li> </ul>	9	<ul style="list-style-type: none"> <li>• Quiz</li> <li>• Group activity: B</li> </ul>
5	<ul style="list-style-type: none"> <li>• Book</li> <li>• Group activity</li> <li>• Worksheet set #2</li> </ul>		

Day 1

Activity	Notes	Materials
Read or listen to the movie version of the book (10 minutes)	<ul style="list-style-type: none"> <li>• Since this is the first time students are seeing the book, I focus a lot on the pictures               <ul style="list-style-type: none"> <li>◦ Ask lots of questions about what they might think the pictures mean or may relate to</li> </ul> </li> <li>• Make connections between the book and the vocabulary board (have students find relevant symbols on their boards to go with a concept or photo on the page.)</li> </ul>	<ul style="list-style-type: none"> <li>• Book</li> <li>• Vocabulary board</li> </ul>
Vocabulary board (5 minutes)	<ul style="list-style-type: none"> <li>• Introduce the vocabulary board and review some of the symbols, finding out which are familiar to students, and which are not</li> </ul>	<ul style="list-style-type: none"> <li>• Vocabulary board</li> </ul>
Group Activity: (15 min)	<ul style="list-style-type: none"> <li>• Choose one of the group activities suggested in the directions for group activity</li> </ul>	<ul style="list-style-type: none"> <li>• Fraction cards</li> <li>• Blank model templates</li> <li>• Dry-erase markers</li> <li>• Eraser</li> </ul>
Worksheet set #1 (10 minutes)	<ul style="list-style-type: none"> <li>• In this set, students do not need to write the fractions. There are only models to work with.</li> <li>• Complete the <b>first 3 worksheets</b> in this set, subtracting models with the same denominator.</li> <li>• Identify any students who need more review on this skill before moving on.</li> </ul>	<ul style="list-style-type: none"> <li>• Worksheet</li> <li>• Pencils</li> <li>• Crayons or markers</li> </ul>
Sharing (10 minutes)	<ul style="list-style-type: none"> <li>• Each student shares one of their finished worksheets with the group using the communication method of their choice</li> </ul>	<ul style="list-style-type: none"> <li>• Completed worksheets</li> <li>• Communication devices</li> </ul>

# PowerPoint

Sometimes, we want to subtract two or more fractions. But, when we subtract two fractions, we need to make sure the pieces are the same size.



That means the denominators need to be the same.

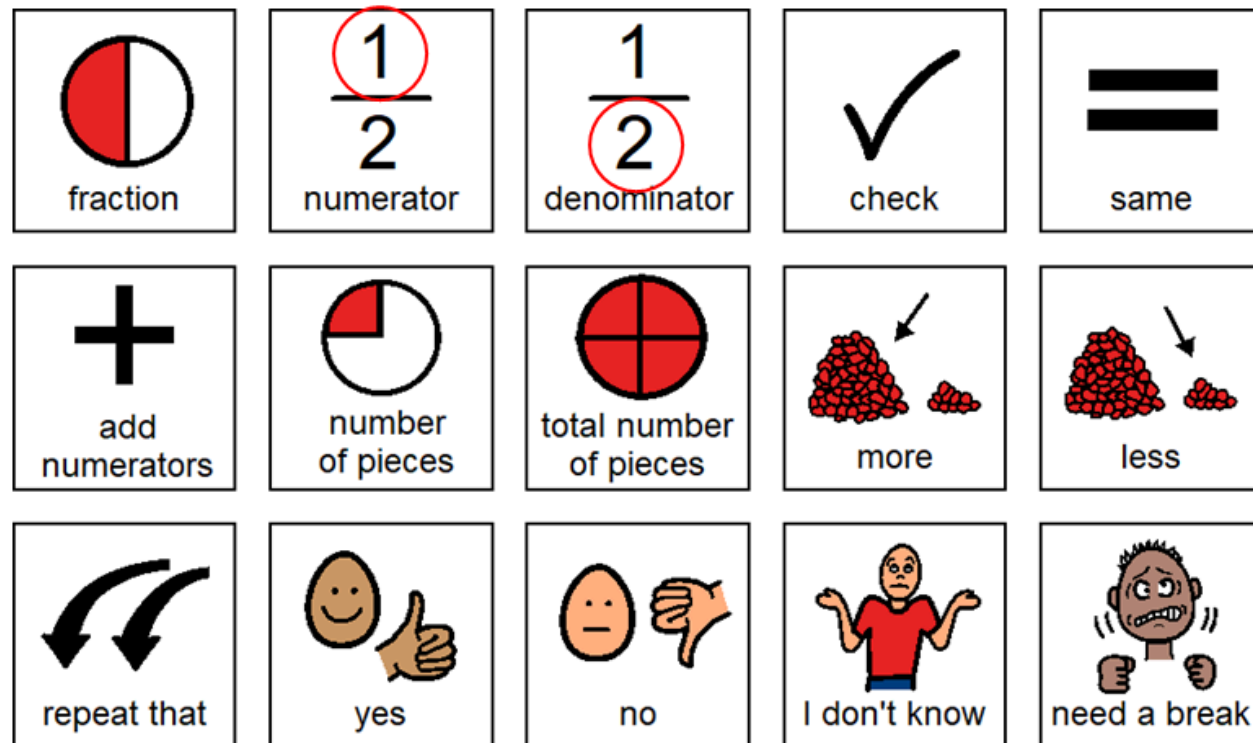
Here is one more. The denominators are the same, so we can subtract the numerators.



$$\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$$

# Vocabulary

This unit comes with a vocabulary board.



- Improve **participation**.
- Increase **engagement** in group discussions.
- Daily group activities.

# Bingo

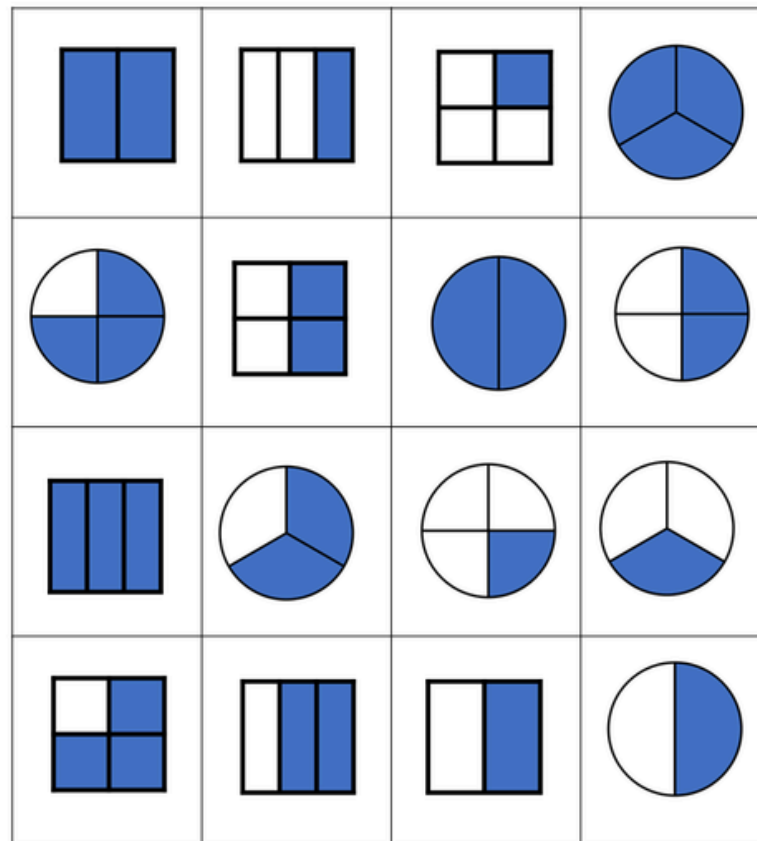
## Bingo cards



- Included are 10 Bingo
- Place the cards in page protectors or laminate for long term use.
- This is a great way to work with fractions either using the information in this unit, or any fraction unit you may have.
- Calling cards are included
- Options:
  - See group activities for different ways to play this game using the information in this unit
  - Work as teams
  - Vary the "winning" patterns.
    - Cover all
    - Cover corners
    - Row across or down
    - Cover the edges
  - Vary the ways to mark the card
    - Place in page protector or laminate and use dry erase markers
    - Stickers
    - Post-it notes
    - Dot markers

©Christa Joy, SNSK

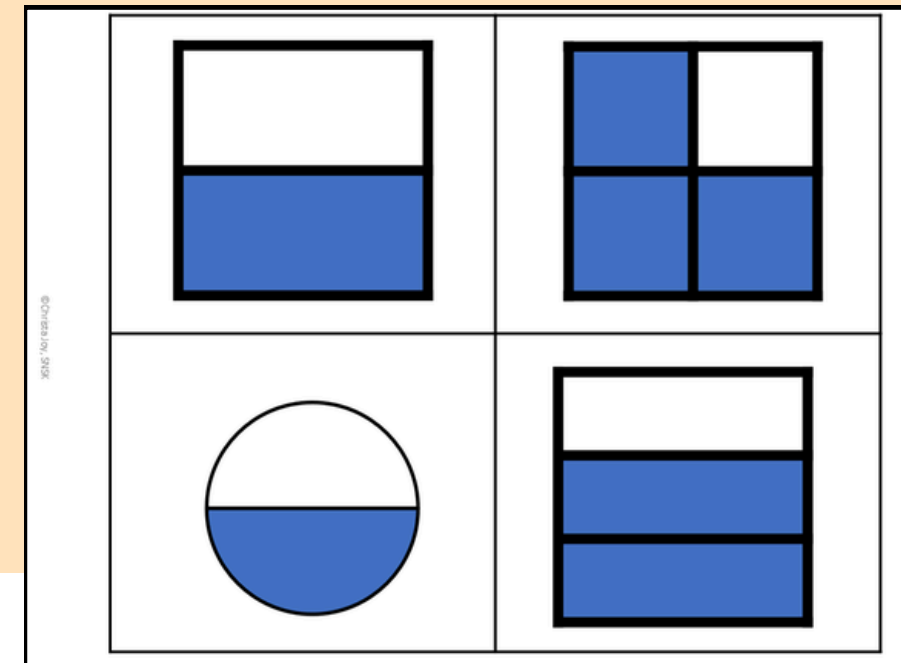
## Fractions



©Christa Joy, SNSK

One of the group activities included is a Bingo game.

Calling cards are included.



©Christa Joy, SNSK

# Group Activities

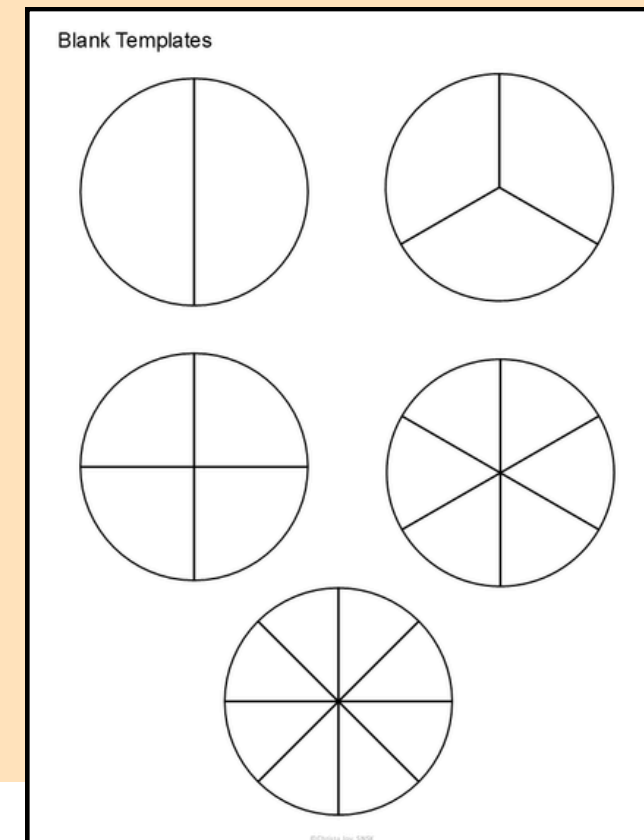
## Hands on fraction activities

- Includes:
  - Fraction cards
  - Model templates that students or teacher can color in
  - Models pre-colored
- Print on cardstock and laminate.
- Suggested uses:
  - To review, have students color in the fraction on their model using dry erase markers.
  - Draw 2 cards and determine if they have the same denominators or not.
  - Place 2 fraction cards on table that have same denominator and students color in the answer on their model if they are subtracted.
  - You color in a model and have students find the correct fraction card that matches.
  - Match all fraction cards or all the models that have the same denominators.
  - Create a subtraction template on construction paper where students can build subtraction sentences. I noted the sizes you will want the blank squares to be to fit the models included.

$$\boxed{3 \text{ inches}} - \boxed{3 \text{ inches}} = \boxed{3 \text{ inches}}$$

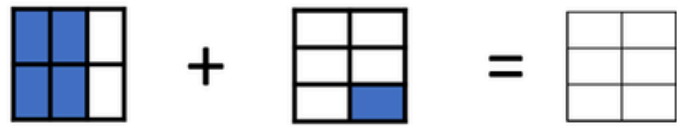
$\frac{2}{4}$	$\frac{3}{4}$
$\frac{4}{4}$	$\frac{1}{6}$
$\frac{2}{6}$	$\frac{3}{6}$

Students will work with fraction models in various ways.



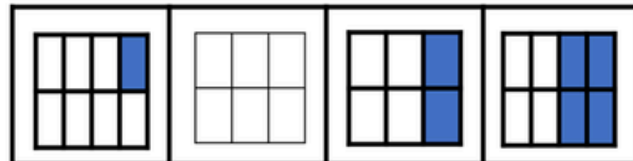
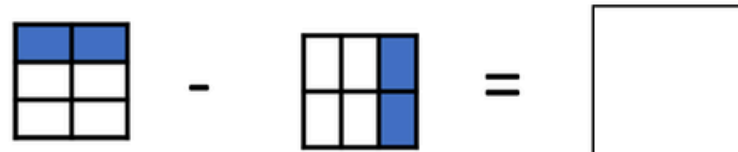
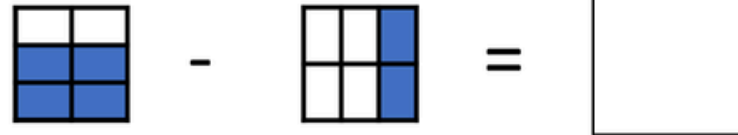
# Worksheet Set 1

Color in the answer to each addition problem below.



©Christa Joy, SNSK

Color in the answer to each subtraction problem below.






©Christa Joy, SNSK




These 12 worksheets review the addition or subtraction of fractions using models.




- coloring in the answer
- cut and paste the correct model




# Worksheet Set 2




Color in the answer to each subtraction problem below and write in the final fraction.

$\frac{3}{8}$   -  $\frac{1}{8}$   =   

$\frac{2}{8}$   -  $\frac{1}{8}$   =   




$\frac{7}{8}$   -  $\frac{2}{8}$   =   




$\frac{7}{8}$   -  $\frac{1}{8}$   =   




$\frac{4}{6}$   -  $\frac{2}{6}$   =   




©Christa Joy, SNSK

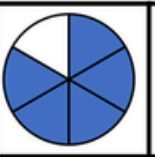
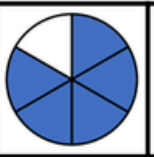
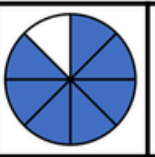

Color in the answer to each addition problem below.

$\frac{3}{6}$   +  $\frac{2}{6}$   =   

$\frac{4}{6}$   +  $\frac{1}{6}$   =   

$\frac{3}{8}$   +  $\frac{1}{8}$   =   

$\frac{5}{8}$   +  $\frac{2}{8}$   =   

©Christa Joy, SNSK

These 12 worksheets review adding or subtracting fractions with models again, but this time, students **write in the final fraction value.**

- coloring in the answer
- cut and paste the correct model

# Quiz

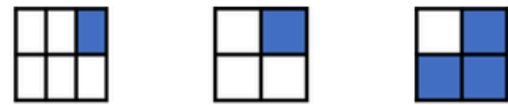
Name: \_\_\_\_\_

Quiz

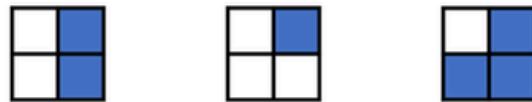
1. Circle the 2 fractions with the same denominators.



2. Circle the 2 fractions with the same denominators.



3. Circle the answer to:  $\frac{1}{2} + \frac{1}{2} = ?$



4. Circle the answer to:  $\frac{1}{3} + \frac{1}{3} = ?$



©Christa Joy, SNSK

5. Circle the answer to:  $\frac{1}{4} + \frac{1}{4} = ?$



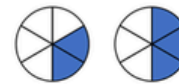
6. Do these two fractions have the same denominator?

- A. Yes
- B. No
- C. I don't know



7. Do these two fractions have the same denominator?

- A. Yes
- B. No
- C. I don't know



8. Add these two fractions.  $\frac{2}{4} + \frac{1}{4} = ?$



There is a short quiz to assess if more teaching is needed.

This is also used as the preassessment.

# Digital Activities



Provide extra practice  
Great independent work centers  
Include a differentiated set of slides  
Interactive

Match the correct fraction model to each problem.

1. Match the correct fraction model to each problem.  
2. Type in the correct fraction value of the answer in the blue box.

©Christa Joy, SNEK