

EQUIVALENT FRACTIONS



INCLUDES GOOGLE SLIDES



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

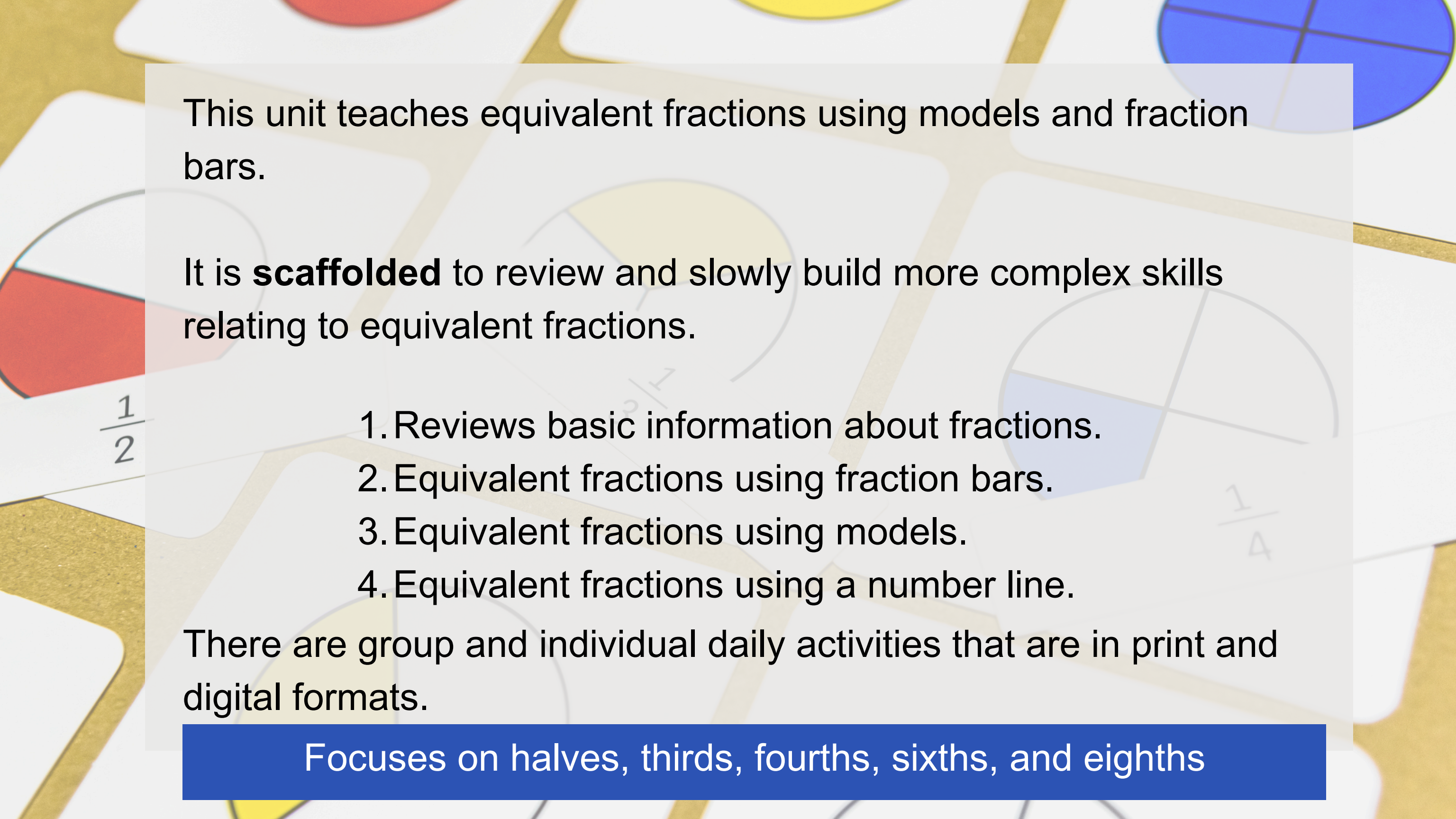
Worksheet pages	Activity
4-5	Vocabulary board
6-20	Bingo cards
21-25	Fraction cards
26-28	Working with fraction bars (group activity)
29-42	Working with models (group activity)
43-52	Working with number lines (group activity)
53-58	Worksheet set 1: review
59-66	Worksheet set 2: fraction bars
67-72	Worksheet set 3: models
73-82	Worksheet set 4: number lines
83-92	Sequencing fractions
93-97	Sorting fractions
98-100	Quiz
101-102	Terms of use

In a separate files:

- Lesson plans
- Directions and links to digital version of the activities
- Adding Fractions book (PowerPoint)
- Activities in color

This unit contains almost 3 weeks of material in print and digital formats. I have included a detailed lesson plan to help you make the most of everything in this unit, including adding some group activities.

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



This unit teaches equivalent fractions using models and fraction bars.

It is **scaffolded** to review and slowly build more complex skills relating to equivalent fractions.

1. Reviews basic information about fractions.
2. Equivalent fractions using fraction bars.
3. Equivalent fractions using models.
4. Equivalent fractions using a number line.

There are group and individual daily activities that are in print and digital formats.

Focuses on halves, thirds, fourths, sixths, and eighths

Day	Activity	Day	Activity
1	<ul style="list-style-type: none"> Book Vocabulary board intro Group activity: coloring in fractions Worksheet set #1: review 	8	<ul style="list-style-type: none"> Book Group activity: fractions on a number line Worksheet set #4: using number lines
2	<ul style="list-style-type: none"> Book Group activity: coloring in fractions Worksheet set #1: review 	9	<ul style="list-style-type: none"> Book Group activity: Bingo Sequencing worksheets
3	<ul style="list-style-type: none"> Book Group activity: fraction strips Worksheet set #2: fraction strips 	10	<ul style="list-style-type: none"> Book Group activity: Bingo Sequencing worksheets
4	<ul style="list-style-type: none"> Book Group activity: fraction strips Worksheet set #2: fraction strips 	11	<ul style="list-style-type: none"> Book Group activity: Bingo Sorting worksheets
5	<ul style="list-style-type: none"> Book Group activity: working with models Worksheet set #3: using models 	12	<ul style="list-style-type: none"> Book Group activity: Bingo Sorting
6	<ul style="list-style-type: none"> Book Group activity: working with models Worksheet set #3: using models 	13	<ul style="list-style-type: none"> Group Quiz
7	<ul style="list-style-type: none"> Book Group activity: fractions on a number line Worksheet set #4: using number lines 		

Day 6

Activity	Notes	M
Read or listen to the movie version of the book	<ul style="list-style-type: none"> Read through the story, asking lots of questions Continue to make connections between book and vocabulary board 	<ul style="list-style-type: none"> Book Movie
Group Activity: Working with models (15 min)	<ul style="list-style-type: none"> See activity (pages 29-42) for directions and suggestions for this group activity. <ul style="list-style-type: none"> You will need to do some prep and print the models out 	<ul style="list-style-type: none"> Fraction models Dry-erase markers Eraser
Worksheet review (5 minutes)	<ul style="list-style-type: none"> Review the worksheets completed yesterday 	<ul style="list-style-type: none"> Worksheets from yesterday
Worksheet set #3: Fraction models (10 minutes)	<ul style="list-style-type: none"> Complete the last 2 worksheets in this set <ul style="list-style-type: none"> Students will color in the blank model to be equivalent to the one shown To differentiate, write in the fraction value on each section review on this skill before moving on. 	<ul style="list-style-type: none"> Worksheet Crayons or markers
Sharing (10 minutes)	<ul style="list-style-type: none"> Each student shares one of their finished worksheets with the group using the communication method of their choice 	<ul style="list-style-type: none"> Completed worksheets Communication devices

13 days

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

PowerPoint

When two things are equal, then they are the same in all aspects. They have the same value, the same function, and the same meaning. Let's look at this simple example to understand the difference.

$$2 = 2$$

equal

$$2 = 1 + 1$$

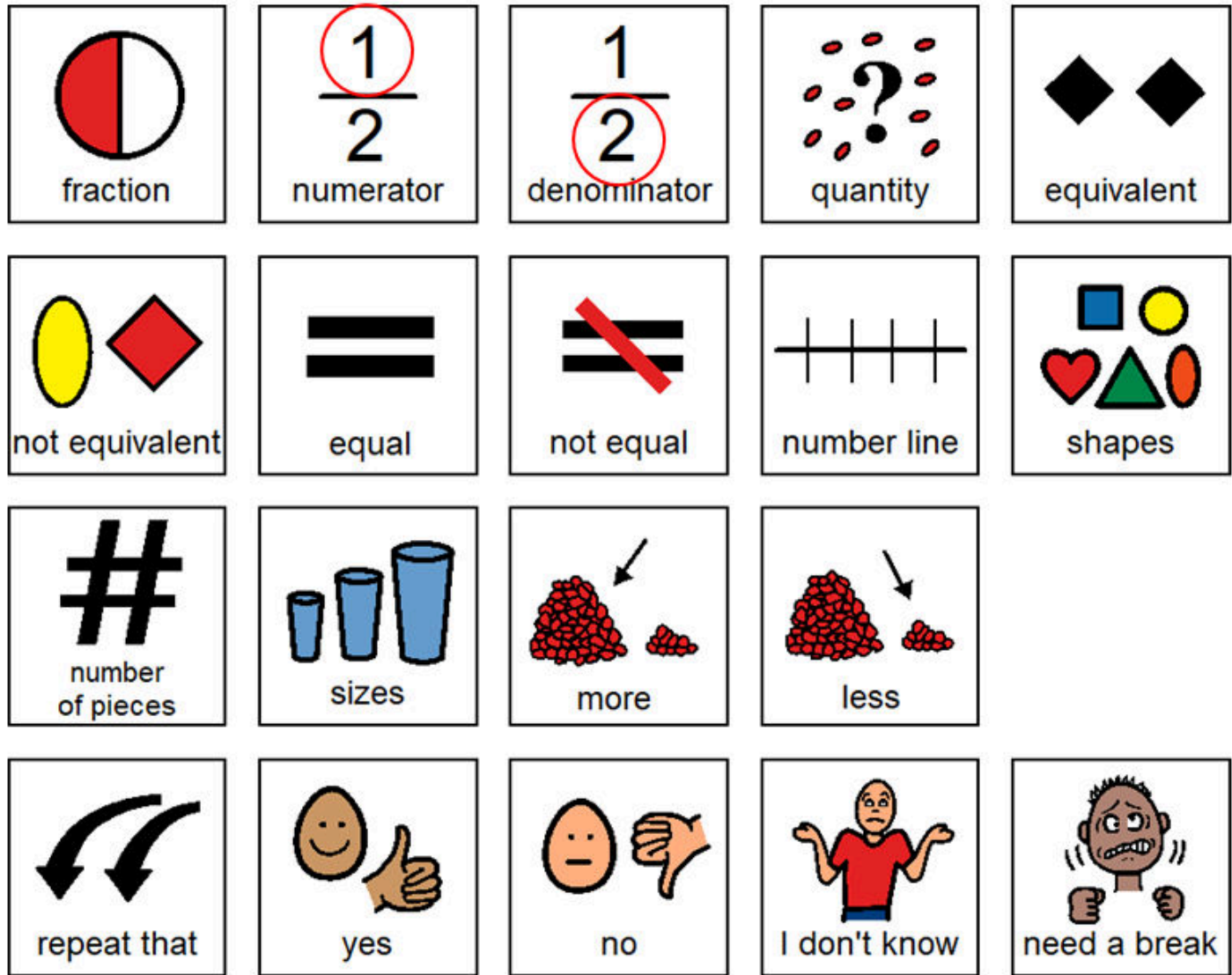
equivalent



This unit contains a 20-page book covering equivalent fractions and ways to work with them.

It comes as:

- PowerPoint
- mp4 version that is animated and narrated



Christa Joy, Special Needs for Special Kids
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This unit comes with a vocabulary board.

Vocabulary boards are great for ALL students to assist with **participation and engagement** in group discussions.

Tips on how to use in the unit!!

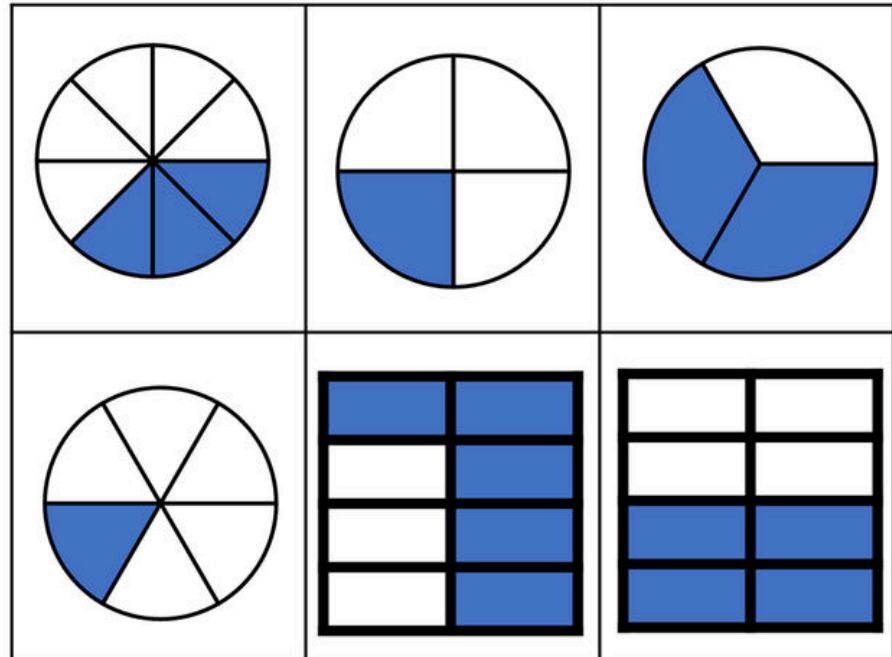
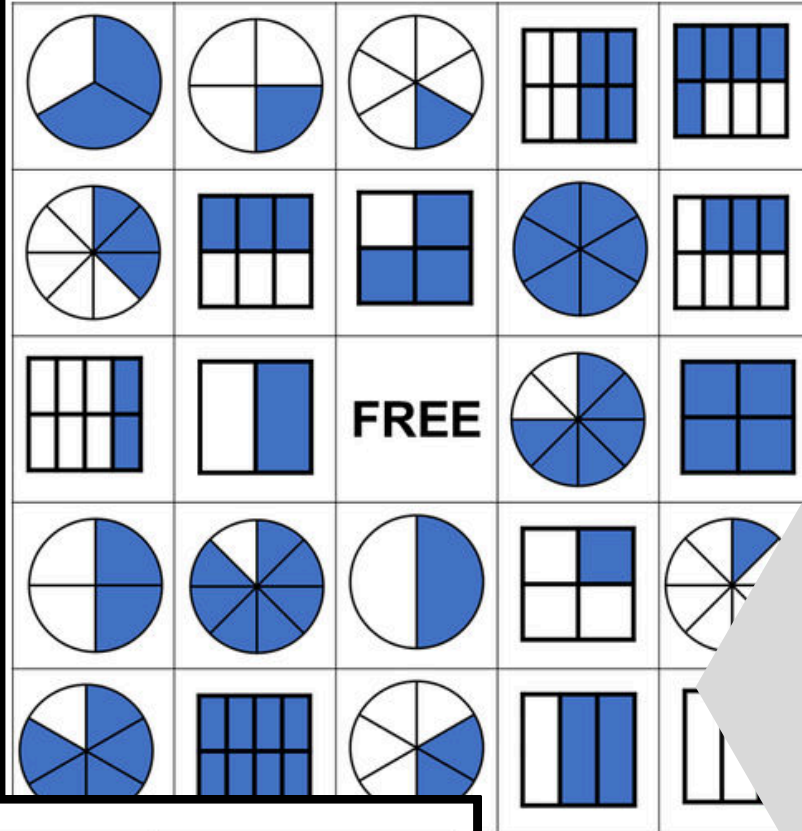
There are no vocabulary cards in this unit



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.
- **Since this is a unit on equivalent fractions, you can have students either mark the exact model you are showing, or any model that is equivalent.**
- 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

Equivalent Fractions



Group activity #1

There are Bingo cards included. You can have students find equivalent fractions when playing.

More suggestions on how to use these cards are included.

calling cards included

Group activity #2

Fraction Bars

- Included:
 - Labeled fraction bars (7 sizes)
 - Blank fraction bars (7 sizes)
- Preparation
 - Ideally make one set for each student
 - Print on cardstock
 - Laminate
 - For durability
 - To color in using dry erase markers
- Activity Ideas
 1. Give students a fraction bar that you have colored and a blank fraction bar that has a different set of pieces. Students will color in their blank fraction bar (with dry erase markers) so the two are equivalent.
 2. Pass out a colored fraction bar to each student and have them find another student who has an equivalent fraction bar.
 3. Give student a fraction bar and a piece of play-doh. Have them make the shape with the play-doh and cut it into the same number of pieces (using a popsicle stick). Have students "mark" the colored sections on the card by marking the same sections in the play-doh. They can use a thumbprint, stamp, or other object to make an impression in the play-doh.
 4. Have students write the fraction represented by the colored in area.

$\frac{1}{1}$									
$\frac{1}{2}$					$\frac{1}{2}$				
$\frac{1}{3}$			$\frac{1}{3}$			$\frac{1}{3}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$			
$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$				
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$		
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

Students will work with **fraction bars** to create and determine if fractions are equivalent.

Working with models

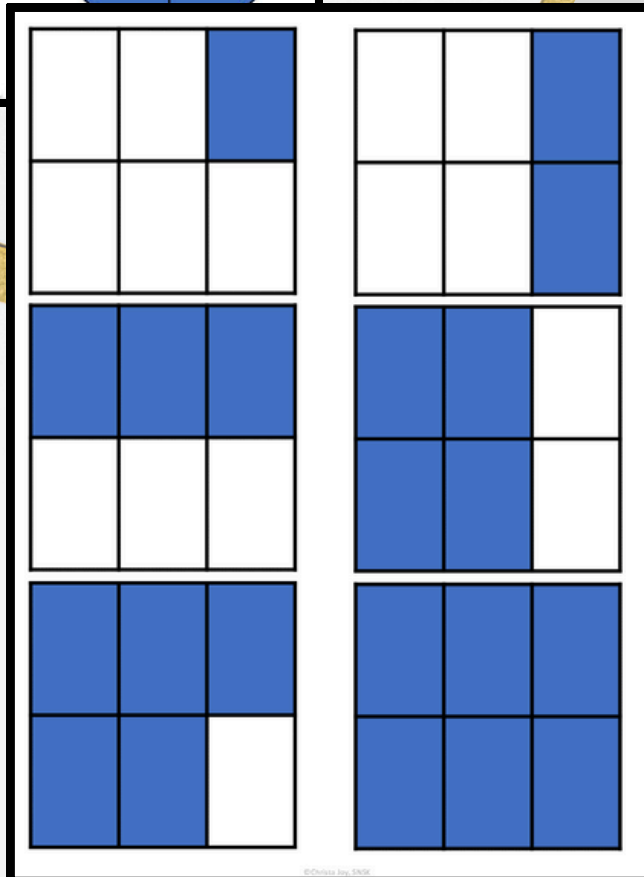
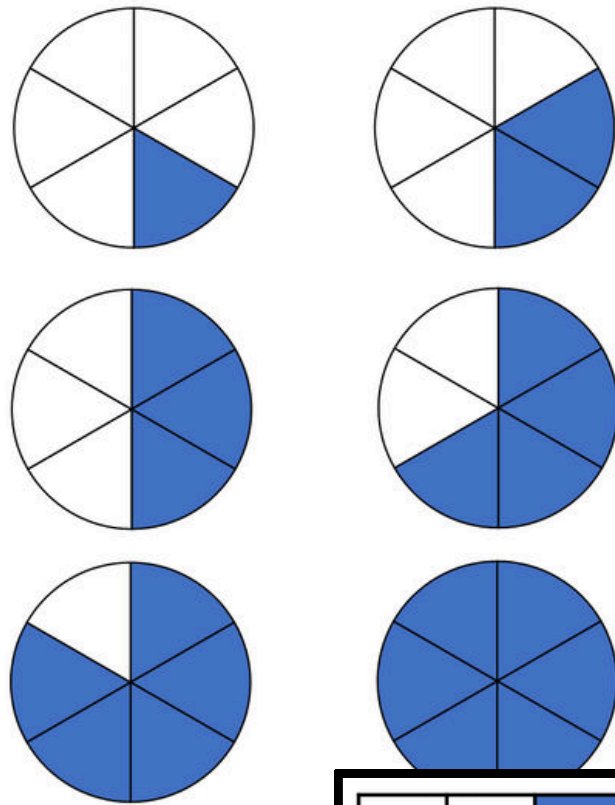
- Included:
 - Colored in models
 - Circles (5 variations) all the same size
 - Square (5 variations) all the same size
 - Blank models Preparation
 - Circles (5 variations) all the same size
 - Square (5 variations) all the same size
- Preparation
 - Ideally make one set for each student
 - Print on cardstock
 - Laminate
 - For durability
 - To color in using dry erase markers
- Activity Ideas
 1. Give students a colored model and a blank model that has a different set of pieces. Students will color in their blank model (with dry erase markers) so the two are equivalent.
 2. Pass out a colored model to each student and have them find another student who has an equivalent fraction.
 3. Give student a fraction card and a piece of play-doh. Have them make the shape with the play-doh and cut it into the same number of pieces (using a popsicle stick). Have students "mark" the colored sections on the card by marking the same sections in the play-doh. They can use a thumbprint, stamp, or other object to make an impression in the play-doh.
 4. Have students write the fraction represented by the colored in area.
 5. Have students hold equivalent fractions that are the same shape but different number of pieces up to the light to see they cover the same area. You can also put them on a light box or overhead projector.
 6. Match models with fraction cards provided in separate file.

Group activity #3

Students will work with **fraction models** to create and determine if fractions are equivalent.

Focuses on halves, thirds, fourths, sixths, and eighths

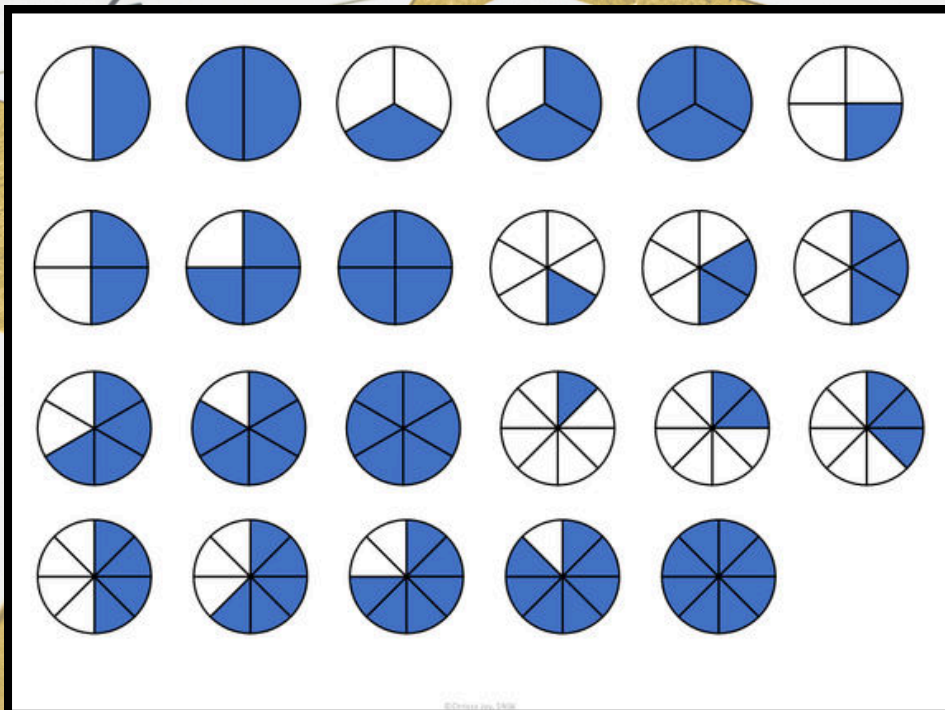
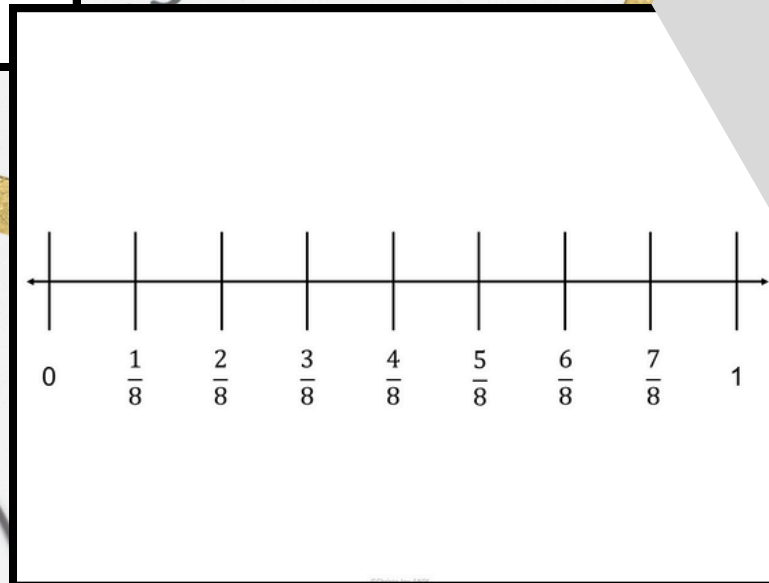
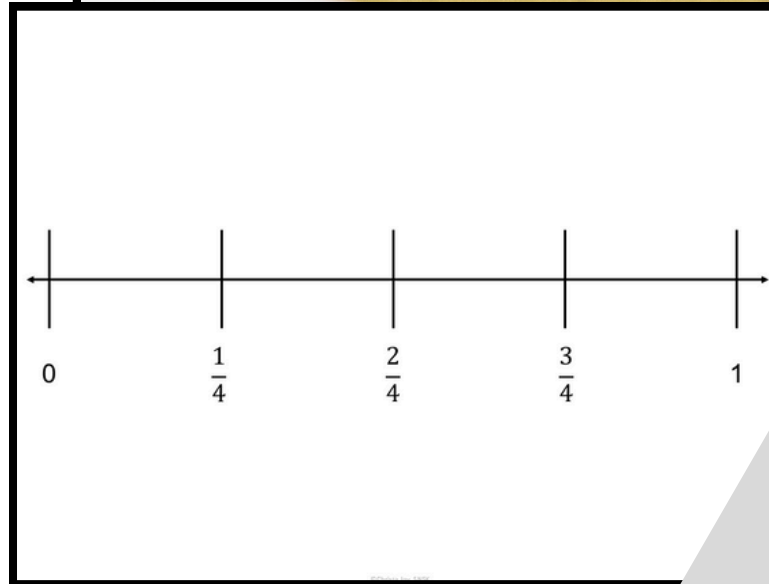
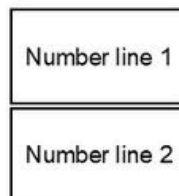
Blank templates included



Group activity #4

Working with number lines









- Included:
 - 5 number lines
 - Models that are reduced in size to fit on number line
 - Blank templates reduced in size
- Preparation
 - Print number lines on cardstock and laminate or place in page protector
 - Print fraction models on cardstock, cut out and laminate
- Activities
 1. Have students practice placing models on number line
 2. Place equivalent fractions on number line
 3. Tape or place two number lines together so when students place models, they can see which are equivalent



Students will use number lines to determine if fractions are equivalent.

Blank templates included

Either circle or use a highlighter to identify the **numerator** in each fraction and model below.

$\frac{2}{3}$	 <input type="checkbox"/>	$\frac{2}{6}$
 <input type="checkbox"/>	$\frac{1}{4}$	 <input type="checkbox"/>
 <input type="checkbox"/>	$\frac{7}{8}$	$\frac{3}{3}$
$\frac{1}{6}$	 <input type="checkbox"/>	 <input type="checkbox"/>
 <input type="checkbox"/>	$\frac{5}{8}$	 <input type="checkbox"/>





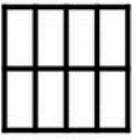


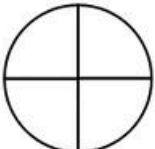

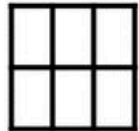
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Worksheet set #1

These 4 worksheets review basic fraction skills:

- id numerator
- id denominator
- write fractions from models
- color in models

Color in the model so it is equivalent to each fraction.

$\frac{1}{4}$		$\frac{2}{2}$	
$\frac{2}{6}$		$\frac{2}{3}$	
$\frac{7}{8}$		$\frac{5}{6}$	
$\frac{3}{3}$		$\frac{3}{4}$	
$\frac{6}{8}$		$\frac{4}{6}$	

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Worksheet set #2

Each fraction bar = 1. Circle the fraction bar that is equivalent to the one shown.

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Color in the second fraction bar so that it is equivalent to the one shown.

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These 6 worksheets use fraction bars:

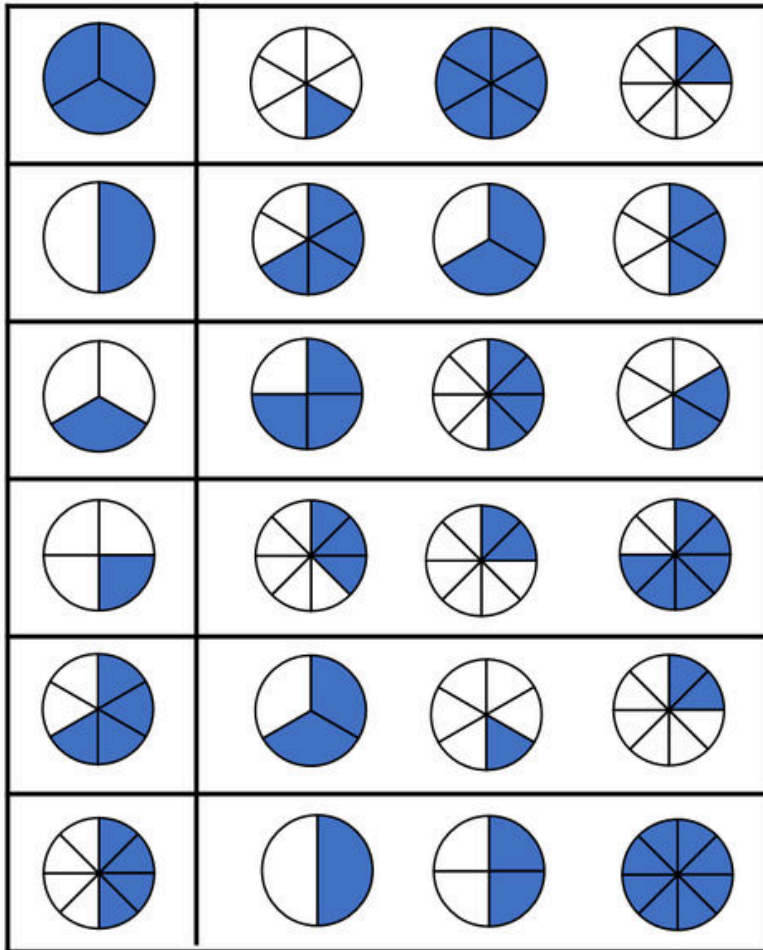
- color in bars to represent a fraction (review)
- identify equivalent fraction bars

Worksheet set #3

These 4 worksheets use fraction models to identify equivalent fractions:

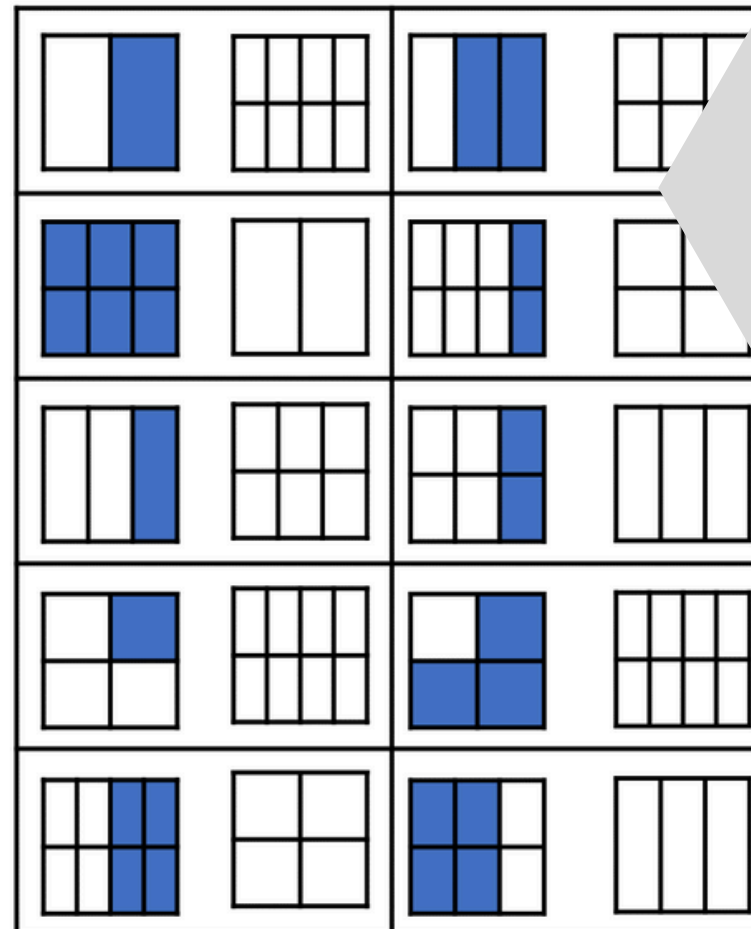
- compare the same shapes with a different number of pieces
- compare different shapes and different number of pieces

Circle the models that are equivalent to the one shown.



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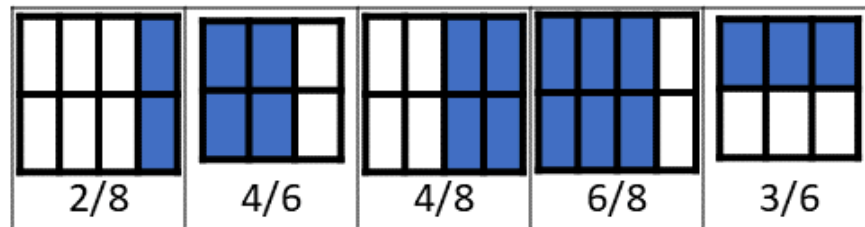
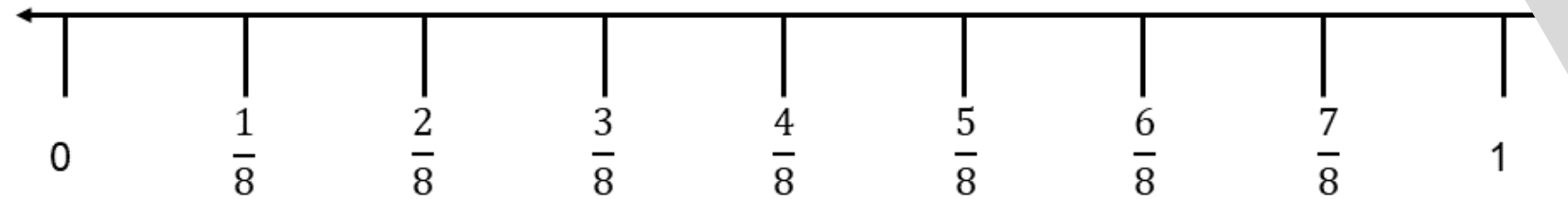
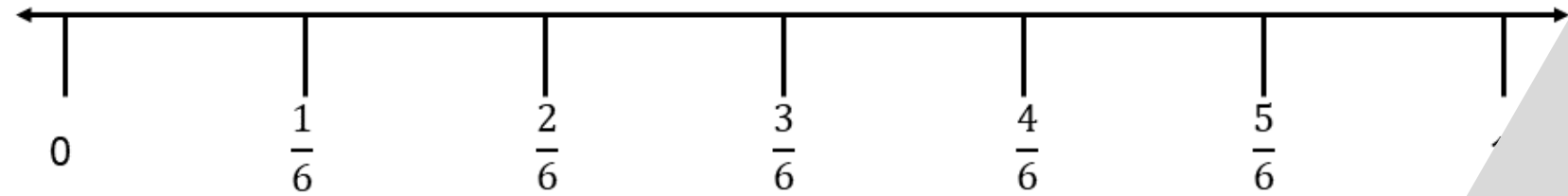
Color in the second model so that it is equivalent to the one shown.



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Worksheet set #4

Place fractions on number lines and circle those that are equivalent.



- These 8 worksheets use number lines to identify equivalent fractions:
- students will cut out fractions and place them on the number line
 - students will circle those that are equivalent on the two number lines

Sequencing

These 8 worksheets have students sequence fraction models from smallest to largest.

- uses the same shapes with a different number of pieces
- uses different shapes and different number of pieces

Place the fractions below in order, smallest to largest.

--	--	--	--	--	--

smallest

largest



$4/8$



$1/8$



$7/8$



Place the fractions below in order, smallest to largest.

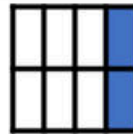
--	--	--	--

smallest

largest



$3/4$



$2/8$



$3/3$



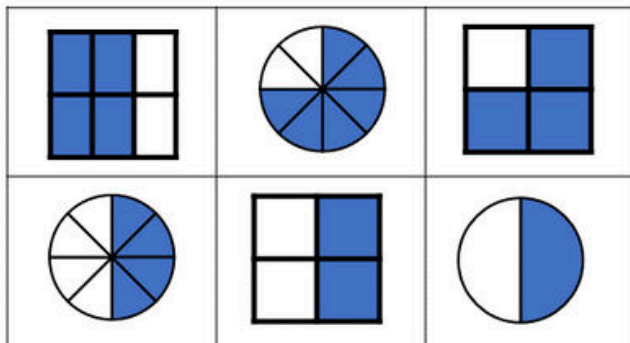
$5/6$

Sorting

These 3 worksheets have students sort fractions that are equivalent.

$$\frac{1}{2}$$

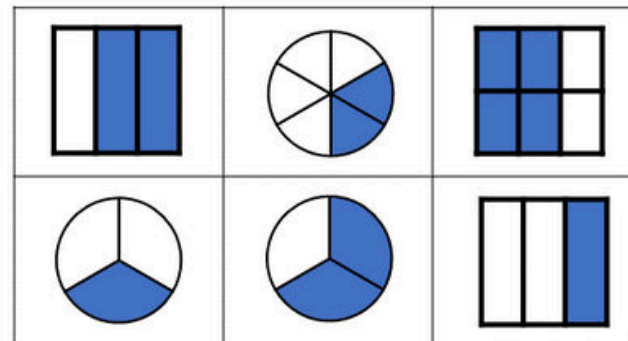
$$\frac{3}{4}$$



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$$\frac{1}{3}$$

$$\frac{4}{6}$$



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Name: _____

Quiz

1. Which of the following is equivalent to $2+2=4$?

$2 - 2 = 0$

$4 + 4 = 8$

$3 + 1 = 4$

2. Circle the fraction equivalent to 1.

$1/2$

$8/8$

$5/1$

3. What is the fraction for this model?

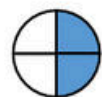


$1/2$

$4/8$

$2/3$

4. Circle all the models that are equivalent to $1/2$.



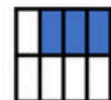
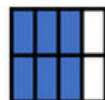
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Quiz

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

This is also used as the preassessment.

5. Circle all the models that are equivalent to $3/4$



6. Are these two models equivalent?



A. Yes

B. No

C. I don't know

7. Are these two models equivalent?

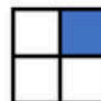


A. Yes

B. No

C. I don't know

8. Are these two models equivalent?



A. Yes

B. No

C. I don't know













Equivalent Fractions

by
Christa Joy

This unit also has digital activities. There is a movie version of the book that students can listen to read aloud.

Great for review

	<input type="text"/> <hr/> <input type="text"/>		<input type="text"/> <hr/> <input type="text"/>
	<input type="text"/> <hr/> <input type="text"/>		<input type="text"/> <hr/> <input type="text"/>
	<input type="text"/> <hr/> <input type="text"/>		<input type="text"/> <hr/> <input type="text"/>
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	<input type="text"/> <hr/> <input type="text"/>		<input type="text"/> <hr/> <input type="text"/>

In the blue box, type in the fraction model.

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The digital activities require students to click and drag their answers. This set includes a few slides where students will type in their answers.

Perfect for every learning level

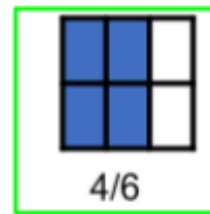
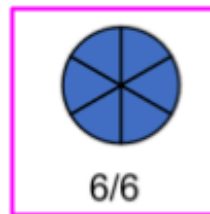
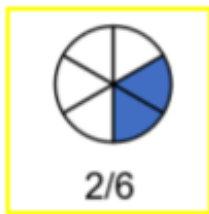
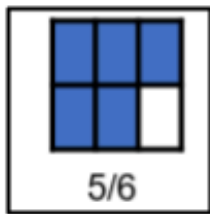
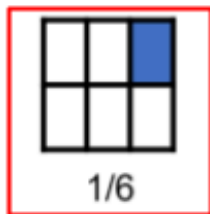
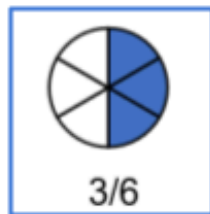


smallest



largest

Place fraction models in order from smallest to largest.



The second set of slides is differentiated using color, and no typing is needed.