

Lesson Parts & Duration

Total Duration: 30 min to 1 hour

• Game: "Every Fraction Needs a Buddy!"

Subject(s)

• Equivalent Fractions: Recognize, Generate, & Explain Using Visual Models (4.NF.A.1).

Objective

- <u>Students will</u> generate equivalent fractions through multiplication $(n \ge a)/(n \ge b)$.
- <u>Students will</u> generate equivalent fractions through division $(a \div n) / (b \div n)$.

Materials

- **Required:** printable game cards (pages 5-8) (1 set per pair) or index cards (38 per pair)/5 pieces (per pair) of blank paper folded into eights and then cut to create game cards
- pencil
- document camera or whiteboard
- scissors (if you printed off the cards or are cutting up paper)
- personal student dry erase boards & dry erase marker (if not available use paper and pencil)
- **Optional:** printable "Break Up Your Day" brain/movement break ideas (page 9)

Instructional Setting

• Students should be seated with or near another student for partner work.

Throughout this lesson, you will find:

- Scripted Text indicates things that need to be said directly. Bullets starting with a "T" followed by *italicized type* indicate scripted text
- Clarifiers within scripted text are in orange
- Teacher Directions indicate things you should be doing
- Side notes provide helpful hints, ELL strategies, differentiation and information
- Break Up Your Day (Brain/Movement Breaks) are in green boxes (at the end)

Remember!

Quality over quantity. All components do not have to be accomplished; lessons may be ended at any time and resumed later.

daybreaklessonplans.com

©2017

Page 1 of 9

It is illegal to copy without express permission.



Subject

• Game: "Every Fraction Needs a Buddy!"

Objective

- <u>Students will</u> generate equivalent fractions through multiplication $(n \ge a)/(n \ge b)$.
- <u>Students will</u> generate equivalent fractions through division $(a \div n) / (b \div n)$.

Materials

- **Required:** one of these options
 - printable game cards (pages 16-19) (1 set per pair)
 - index cards (38 per pair) or
 - o 5 pieces (per pair) of blank paper folded into eights and then cut into squares
- document camera or whiteboard
- scissors (if you printed off the cards or are cutting up paper)
- personal student dry erase boards & dry erase marker (if not available use paper and pencil)

Print off one set of game cards (pages 16-19) for each pair or start lesson by having groups make their fraction cards.

$\frac{1}{2}$	$\frac{2}{2}$	$\frac{1}{3}$	$\frac{4}{5}$	$\frac{5}{5}$	$\frac{1}{6}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	$\frac{9}{10}$	$\frac{10}{10}$
$\frac{2}{3}$	$\frac{3}{3}$	$\frac{1}{4}$	$\frac{2}{6}$	$\frac{3}{6}$	$\frac{4}{6}$	$\frac{8}{8}$	$\frac{1}{10}$	$\frac{2}{10}$		I
$\frac{2}{4}$	$\frac{3}{4}$	$\frac{4}{4}$	$\frac{5}{6}$	$\frac{6}{6}$	$\frac{1}{8}$	$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$		
$\frac{1}{5}$	$\frac{2}{5}$	$\frac{3}{5}$	$\frac{2}{8}$	$\frac{3}{8}$	$\frac{4}{8}$	$\frac{6}{10}$	$\frac{7}{10}$	$\frac{8}{10}$		

Introduction

- *T* Today we will be playing a game called, "Every Fraction Needs a Buddy!".
- *T* In this game, you will be trying to create as many equivalent fractions as you can.
- *T* We will start by getting our playing cards ready first and then I will explain to you how to play the game.

Follow the "Getting Ready" section based on if you are creating cards or have printed them.

Getting Ready: Using Printable Game Cards

- ${\it T}$ You and a partner will only need one set of cards to play with.
- T When I say "Equivalent," I want you to find a partner that you have not worked with already today. Monitor that all students are finding partners, step in if students are struggling to pair up.
- **T** "Equivalent!"
- T With your scissors, you need to carefully cut along the lines to cut out the 4 sheets of fraction cards.
- T Split up the work with your partner so that everyone is working equally.

Getting Ready: Using Printable Game Cards

- ${\it T}$ You and a partner will only need one set of cards to play with.
- T When I say "Equivalent," I want you to find a partner that you have not worked with already today.Monitor that all students are finding partners, step in if students are struggling to pair up.



- Т "Equivalent!"
- **T** I will give each group (38 index cards or 5 pieces of blank paper to fold into eights and cut out).
- T You need to write 1 fraction per card.
- *T* We are writing halves, thirds, fourths, fifths, sixths, eighths, and tenths.
- **T** Remember that $\frac{2}{2}$, $\frac{3}{3}$, $\frac{4}{4}$, $\frac{6}{6}$, $\frac{8}{8}$, $\frac{10}{10}$ all need to be included. List all 38 fractions on the board for them to reference and write on their cards.

How to Play

- Τ Since the name of the game is, "Every Fraction Needs a Buddy!", the goal of our game is to create equivalent fractions or "buddies".
- You will start by spreading out all of your cards face down. Т
- *T* When it is your turn, you will pick any card and turn it over.
- *T* The card you pick will be your fraction.
- **T** You will then have 30 seconds to try to create as many equivalent fractions as you can.
- *T* Your partner will watch the clock for 30 seconds while you work.
- Т The catch is that you must show all of your work.
- **T** This means that you need to show either the multiplication or division equation you used to create your equivalent fractions.
- T Once time is up, your partner will check your work to see how many correct equivalent fractions you were able to create.
- T If you can create 3 or more correct equivalent fractions in 30 seconds you earn 5 points.
- T 2 correct equivalent fractions earn you 2 points, 1 correct earns you 1 point and 0 correct earns you 0 points.
- T Then it is your partner's turn to pick a fraction card.
- Т They will also get 30 seconds to create as many correct equivalent fractions as they can.

Practice Round Demonstrate spreading out cards face down to prepare to play.

2

Т	Let's say that the first card I pick is $\frac{2}{3}$.	7	
Т	I am going to need a buddy to watch the clock for 30 seconds for	$\frac{2 \times 2}{3 \times 2} = \frac{4}{6}$	$\frac{2}{2} = \frac{4}{6}$
	me. Call on a student to be your partner and watch the clock.	3 X Z 0	3 0
T	When my partner says go, I will try to write as many equivalent	$2x3_{6}$	2 _ 6
	fractions to $\frac{2}{3}$ as I can. Model writing equivalent fractions on either the	$\overline{3x3} = \overline{9}$	3 9
	whiteboard or document camera. Use the examples on the right.	•	
T	Now that time is up you can see I was able to write tell how many	2x4 - 8	2 _ 8
	equivalent fractions you created equivalent fractions in 30 seconds.	3x4 - 12	3 12

- My partner will now check my work to see how many are correct. Т Assist student in checking you work for demonstration purposes.
- T So, my partner agrees that I earned: 5 points for 3 or more, 2 points for 2, 1 point for 1 or 0 points for 0 points during my turn.
- T Now it is my partner's turn to try.
- *T* He/She will pick any fraction card.
- T He/She picked name fraction selected.
- **T** I will watch the clock for 30 seconds while my partner tries to make as many equivalent fractions as he/she can in 30 seconds. Watch the clock for 30 seconds.
- T Ok, time is up!
- T My partner made name how many fractions he/she created equivalent fractions.
- T Now I will check his/her work. Check the accuracy of the answers.

©2017



- T My partner earned: 5 points for 3 or more, 2 points for 2, 1 point for 1 or 0 points for 0 points during his/her turn.
- *T* You will continue to play until there are no cards left or you run out of time.
- *T* Remember to be a good sport and congratulate the winner!

Walk around and monitor students as they play. If students are struggling join them for a round to get them on track. If students are off task, give them a warning that they will not be allowed to play if they continue to be off task.

🍀 Make sure to "Break Up Your Day!" 🍀

Now is a great time to take a break and get students re-energized. See our list of engaging movement and brain break ideas to get your students moving and ready to refocus! (see page 9)



1 2	2 2	$\frac{1}{3}$
$\frac{2}{3}$	3 3	1 4
2 4	3 4	4 4 4
1 5	2 5	3 5

daybreaklessonplans.com

©2017 It is illegal to copy without express permission.



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

daybreaklessonplans.com

©2017 It is illegal to copy without express permission. Page 6 of 9



5	6	7
8	8	8
8	1	2
	10	10
3	4	5
10	10	10
6	7	8
10	10	10

daybreaklessonplans.com

©2017 It is illegal to copy without express permission.





Make sure to "Break Up Your Day!"

These can be used in the middle of a lesson or at the end of your lesson. Here are a few engaging movement and brain break ideas to get your students moving and ready to refocus!

