

Curriculum topics:

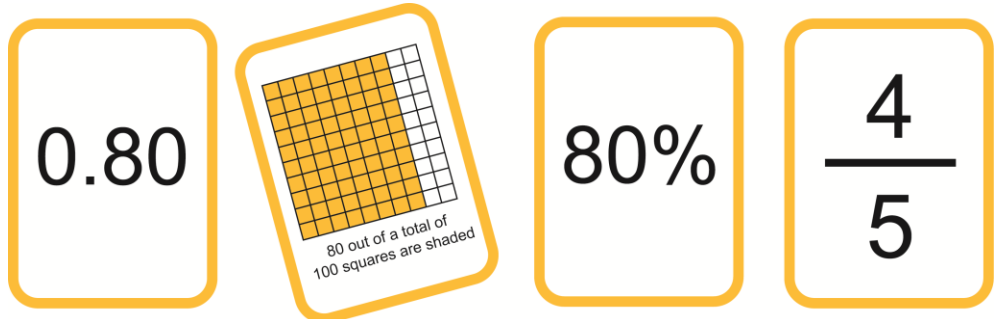
- Equivalent parts
- Fractions
- Decimals
- Percent
- 100's charts

Subject: Math

Grade range: 3 – 8

MATCH MY PART

Combine parts of a whole to make a match



0.80

80 out of a total of 100 squares are shaded

80%

$\frac{4}{5}$

These four cards are equivalent.

Match Equivalent Fractions, Decimals, Percents, and 100's charts in this fast-paced game! Playing this game reinforces recognizing different forms of equivalent numbers and parts of a whole.

If $\frac{3}{5}$ is equivalent to 60%

Match!

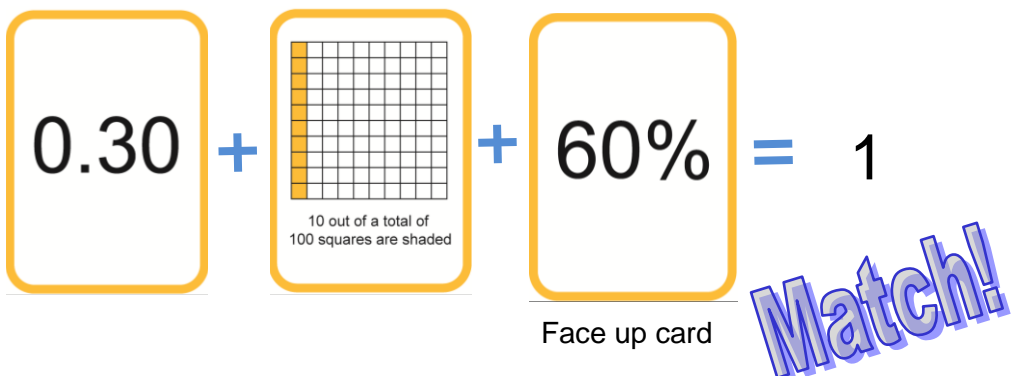
Face up card

Who we are:

Resource Area for Teaching (RAFT) helps educators transform the learning experience through affordable "hands-on" activities that engage students and inspire the joy and discovery of learning.

For more ideas and to see RAFT Locations

Visit www.raft.net/more



0.30 + 10 out of a total of 100 squares are shaded + 60% = 1

Face up card

Match!

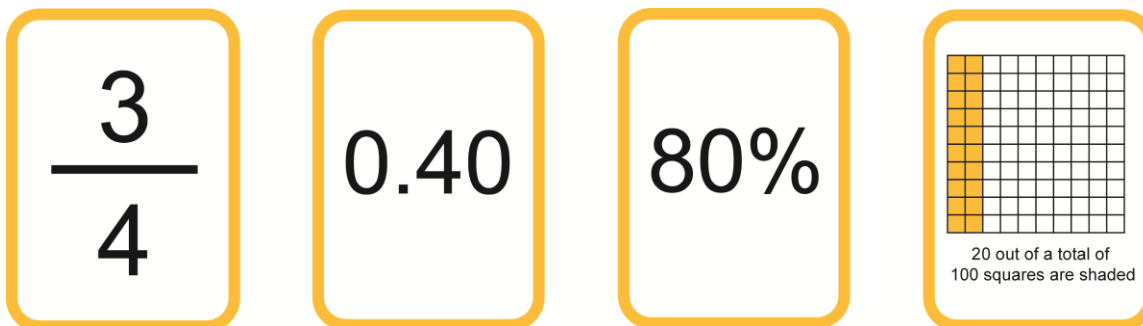
Materials required

- Match My Part cards, 1 deck

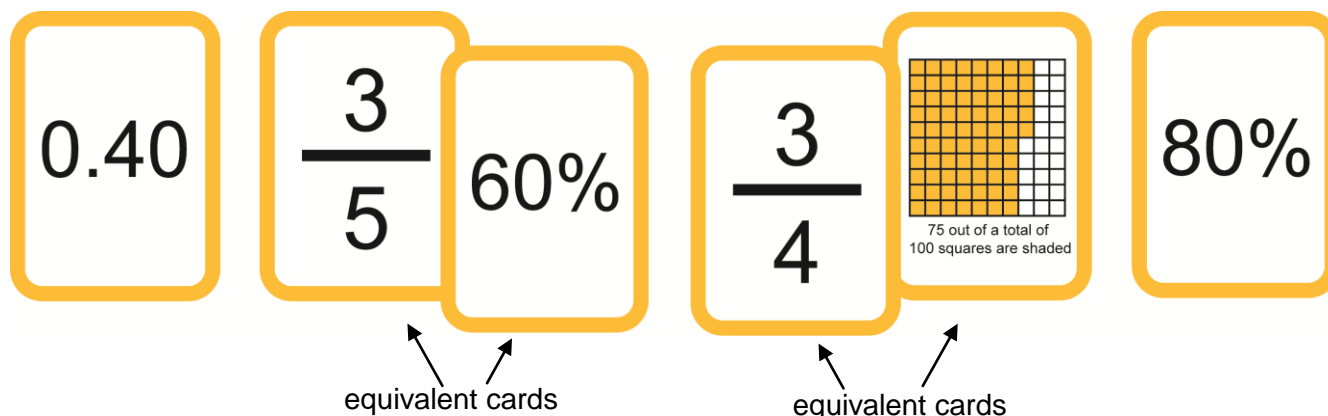
[Download a pattern for labels for the cards at www.raft.net/raft-idea?isid=618.]

Before the game

- 1 Teacher: Review Match My Part cards – include all cards that are appropriate to the level and experience of the students.
- 2 Have students explore the cards to become familiar with the different types that are being used: fractions, decimals, percentages, and 100 charts.



- 3 Optional: Have students line up the cards in order of the card's values – place equivalent cards together.



Playing the game (for 2 to 4 players)

- 1 Each player draws a card. The player with the highest value goes first. If there are any equivalent cards, those players draw again. Return all cards to the deck, shuffle the deck and place face down.
- 2 The first player deals each player 7 cards, and then turns over the top card of the deck and places it face up on top of the rest of the deck. After the first player, play continues to the left.

3

Each player takes turns trying to match one or more of their cards with the revealed card. A “Wild Card” represents any value that can be played. Players only play on their own turn.

**4**

A “match” is made when one of the following conditions occurs on a player’s turn:

- One or more of the cards in their hand is equivalent to the face up card.
- One or more of the cards in their hand when added to the face up card add to 1.
- Optional rule: If a player doesn’t have any cards that match using the above conditions players may make a match by choosing 2 or more equivalent cards from their own hand.

5

If a match is made, the player lays all matching cards down (including the revealed card) and everyone verifies the match. The player who made the match keeps the matching cards apart from the cards in the player’s hand. A new card is drawn from the deck and is placed face up for the next player to match.

6

If no match is made, a player keeps drawing cards from the deck, keeping each card, until a match is found.

7

When the last possible match is played, each player counts up the total number of matching cards they have. The player with the most matching cards wins!



The math behind the activity

This game encourages students to notice relationships between equivalent fractions, decimals, percents, and parts of 100, and to practice combining numbers that add to 100%. The 100 charts visually reinforce the idea of parts of a whole. Recognizing and operating with common fractions, decimals, percents, and illustrations that display parts of one whole is a necessary and useful skill ---- in mathematics and in everyday situations.

Curriculum Standards:

Understand and compare fractions (Common Core Math Standards: Number & Operations - Fractions, Grade 3, 1, 2, & 3; Grade 4, 1, 2, & 3)

Equivalent fractions & decimals (Common Core Math Standards: Number & Operations - Fractions, Grade 4, 4, 5, 6, & 7 Grade 5, 3)

Add and subtract fractions (Common Core Math Standards: Grade 5, Number & Operations - Fractions, 1 & 2)

Percent of a quantity as a rate per 100 (Common Core Math Standards: Ratios and Proportional Relationships, Grade 6, 3.c)

Problem Solving and Reasoning (Common Core Math Standards: Mathematical Practices Grades 3-8)

Additional standards at: <http://www.raft.net/raft-idea?isid=618>

Learn more

- Think of other ways to make a match.
- Refer to other parts of a whole such as parts of a circle, fraction tiles, or dividing a shape into other parts.

Related activities: See RAFT Idea Sheets:

Easy Piecy Decimals -

<http://www.raft.net/ideas/Easy Piecy Decimals.pdf>

Flip Over Fractions -

<http://www.raft.net/ideas/Flip Over Fractions.pdf>

Frac Jack -

<http://www.raft.net/ideas/Frac Jack.pdf>

Fraction Action Game -

<http://www.raft.net/ideas/Fraction Action Game.pdf>

Fraction Action Plus -

<http://www.raft.net/ideas/Fraction Action Plus.pdf>

Fraction Race -

<http://www.raft.net/ideas/Fraction Race.pdf>

Tangram Tactics -

<http://www.raft.net/ideas/Tangram Tactics.pdf>



Resources

Visit www.raft.net/raft-idea?isid=618 for “how-to” video demos & more ideas!

See these websites for more information on the following topics:

- **Converting Decimals, Fraction, and Percents:**
<http://www.purplemath.com/models/percents.htm>
& <http://mathforum.org/dr/math/faq/faq.fractions.html>
- **Videos and exercises on fractions from the Khan Academy —**
<https://www.khanacademy.org/math/arithmetic/fractions>
- **Videos and exercises on decimals & percent from the Khan Academy —**
<https://www.khanacademy.org/math/arithmetic/decimals>
- **Teacher designed math courses from the New Jersey Center for Teaching & Learning —** <https://njctl.org/courses/math>