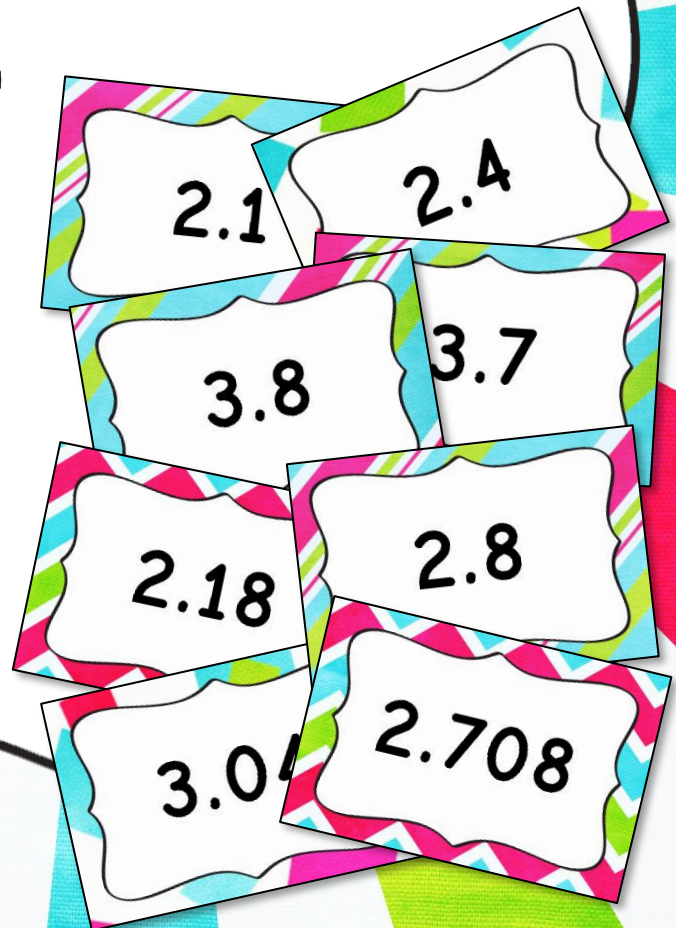
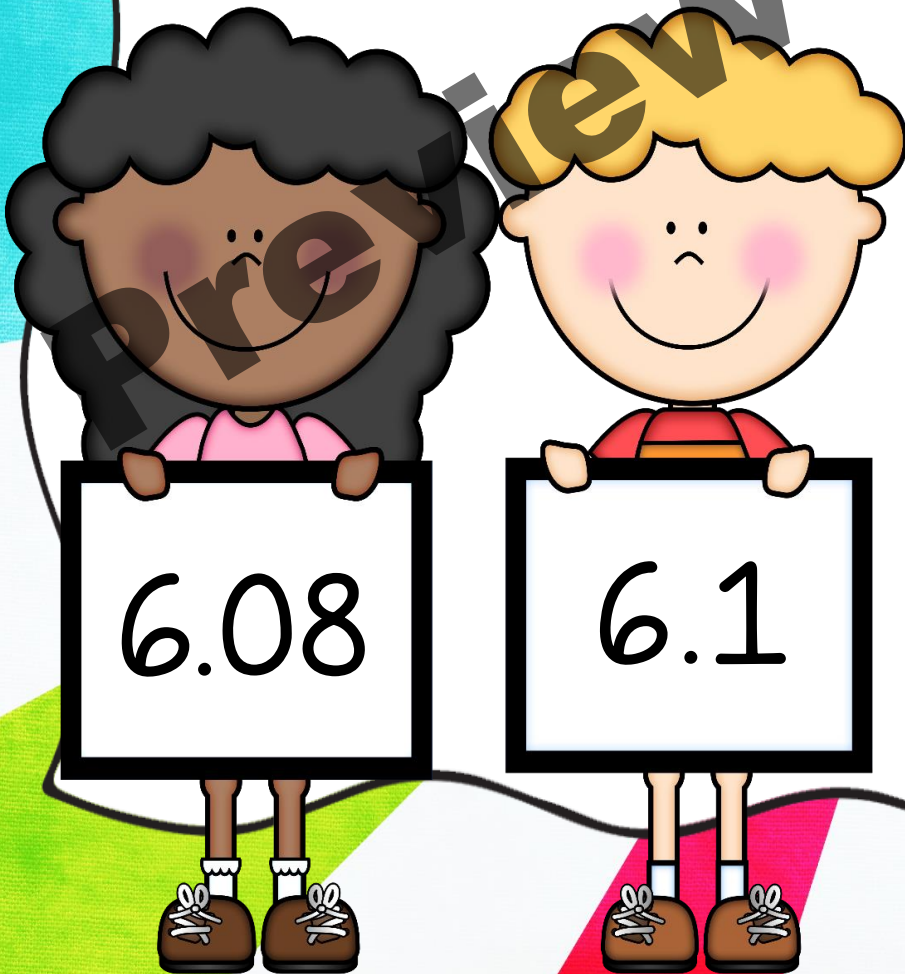


Comparing and Ordering Decimals

Capture the Decimals

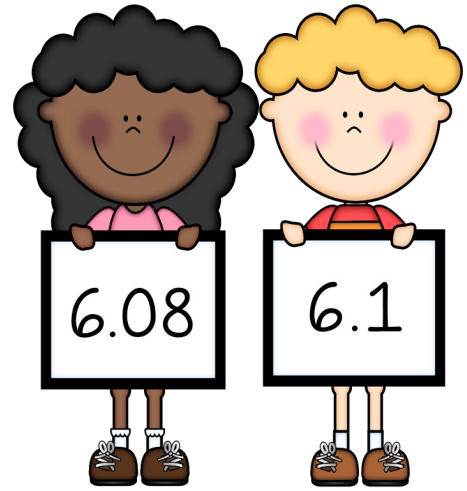
Fun Review Game with Formative Assessments

Laura Candler



Capture the Decimals

by Laura Candler



Capture the Decimals includes an exciting math review game for comparing and ordering decimals plus several formative assessments. To play the game, students take turns placing decimal cards in sequential order. If a player is able to place one of his or her cards between two other cards, he or she may capture and take all three cards. This product includes three levels of ready-to-use game cards, as well as blank cards, which makes it easy to differentiate instruction and meet the needs of your students. The Capture the Decimals game works well in a whole class setting, in small guided math groups, in cooperative learning teams, and in math centers.

Common Core Math Content Standards

- 4.NF.C.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.
- 5.NBT.A.3.B Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.



What's In *Capture the Decimals*?

- Lesson Suggestions
- Comparing Decimals Quick Check and Answers
- Ordering Decimals Quick Check and Answers
- Capture the Decimals Class Directions
- Capture the Decimals Partner Directions
- 15 Partner Game Decimal Cards per level
- Blank Game Cards

Located in Zip File

- Whole Class Large Decimal Cards (Levels A, B, and C - 28 cards per set in separate files)
- Blank Game Cards

Capture the Decimals
Class Game

Capture the Decimals Partner Cards Level A

Comparing Decimals Quick Check - Level B

Remember to compare the value in each place. Use the $<$, $>$, or $=$ symbol to show their relationship.

Examples

$2.41 > 2.07$ $5.12 < 5.8$ $7 > 6.7$

Your Turn! **Work Space**

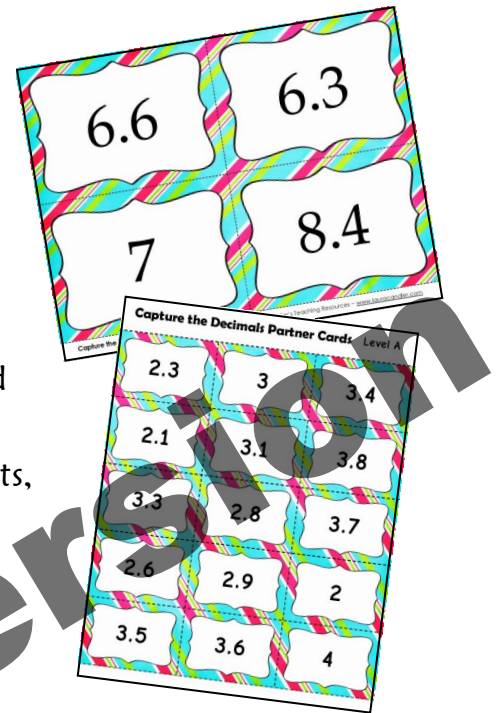
1) 9.27 9.08
2) 3.65 3.8
3) 5.7 5.26
4) 9 8.59
5) 2.9 2.90

Decimal Card Levels

- Level A - whole numbers and tenths
- Level B - whole numbers, tenths, and hundredths
- Level C - whole numbers, tenths, hundredths, and thousandths

Advanced Preparation

1. Decide which levels are appropriate for your class. Fourth grade may only need the first two levels, but 5th graders will probably need all three.
2. Print one set of the large decimal cards for the class, printing them on card stock if possible. (The large cards are located in separate files within the Capture the Decimals folder.) Laminate the cards, cut them apart, and shuffle them before the game begins.
3. Print one set of small decimal cards for every two students, printing them on card stock if possible. Laminate them before cutting them apart. The small cards can be kept separate and stored in zippered plastic bags by level or shuffled together for the most challenging game.

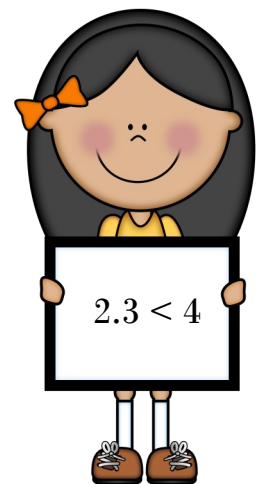


Suggested Lesson Sequence:

For each lesson below, choose the level or levels (A, B, and/or C) that are right for your class.

1. Review Comparing and Ordering Decimals

Display one of the Quick Check teacher pages using a document camera or an interactive whiteboard. To keep the entire class involved, ask each student to record his or her answer on a dry erase board. Work through the problems, one at a time, and make a note of any students who may need extra help. Answer keys can be found after each Quick Check.



Comparing Decimals Quick Check - Level A

Remember to place the smaller decimal on the left and the larger on the right.

$3.6 > 3.1$

Your Turn!

- 1) 4.2 > 4
- 2) 3.6 > 3
- 3) 5.7 > 5
- 4) 8 > 7
- 5) 4.1 > 2

Comparing Decimals Quick Check - Level B

Remember to place the smaller decimal on the left and the larger on the right.

$2.41 > 2.07$

Your Turn!

- 1) 9.27 > 9
- 2) 3.65 > 3
- 3) 5.7 > 5
- 4) 9 > 8
- 5) 2.9 > 2

Ordering Decimals Quick Check - Level A

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.

Examples: 3.8 4.5 4.9 ★ 7 7.4 8.2 8.7

Your Turn!

Work Space

- 1) 2.8 2.3 2
- 2) 5.2 5 6.4
- 3) 9.3 8.7 7.4
- 4) 6 5.2 5.8 6.3

Ordering Decimals Quick Check - Level C

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.

Examples: 4.814 5.05

Your Turn!

- 1) 2.8 2.32
- 2) 6.13 6 7
- 3) 5.2 5.078
- 4) 3 2.605
- 5) 4.9 4.02

Ordering Decimals Quick Check - Level B

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.

Examples: 2.81 3.05

Your Turn!

Work Space

- 1) 5.8 5.32
- 2) 7.23 7
- 3) 1.8 1.78
- 4) 4.9 4.65

Ordering Decimals Quick Check - Level A

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.

Examples: 3.8 4.5 4.9 ★ 7 7.4 8.2 8.7

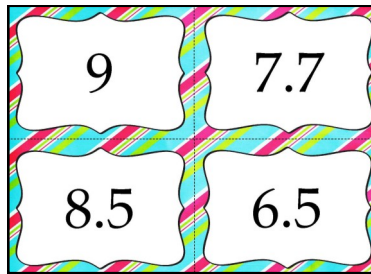
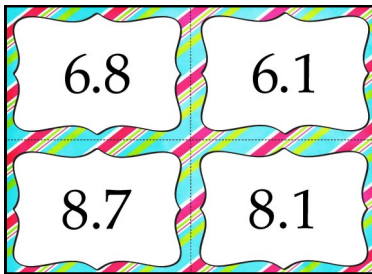
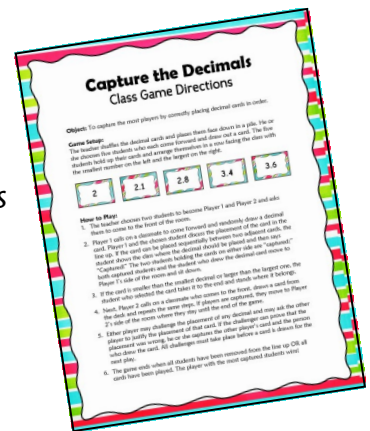
Your Turn!

Work Space

- 1) 2.8 2.3 2
- 2) 5.2 5 6.4
- 3) 9.3 8.7 7.4
- 4) 6 5.2 5.8 6.3

2. Introduce Capture the Decimals Whole Class Game

Start with the Whole Class Game. After your students understand this version, they will find the partner version easy to learn. Post the directions (page 17) and review them with the class. You'll need one deck of the large decimal cards (28 cards - 4 cards to a page). As students are selected, give them one card to hold up during the game.



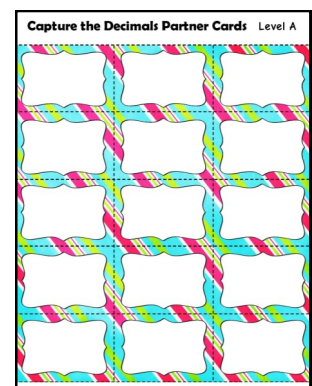
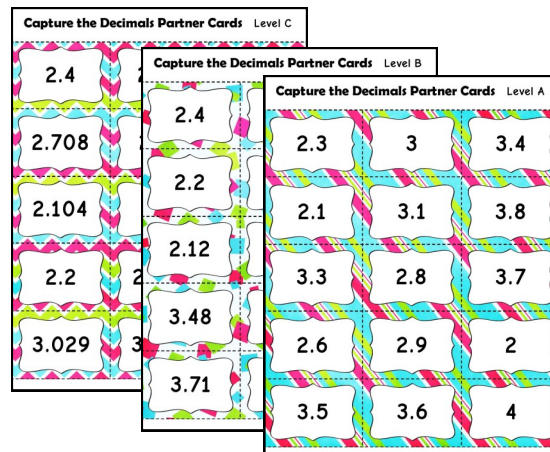
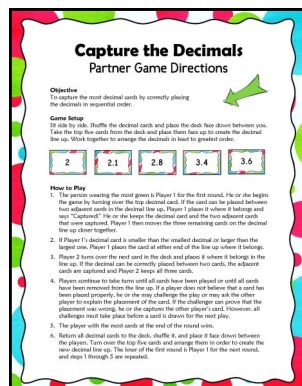
Teaching Tip: If you find the cards to be too small for students at the back of the room to read, give the cards out in advance and have students transfer their decimals to individual white boards. Then ask them to place their white boards face down until they are called on to participate.

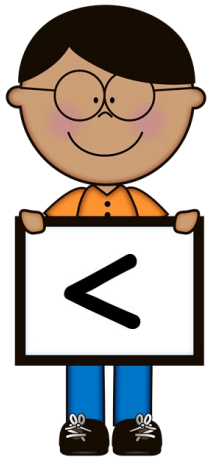


3. Introduce the Capture the Decimals Partner Game

Divide your class into pairs of students. If you have an extra student, have two students to play together as a team and ask them to consult with each other during the game. You can also differentiate the activity by pairing students of similar abilities and giving them different sets of cards (Level A, B, or C). For the most challenging level, ask them to shuffle all three sets of cards together.

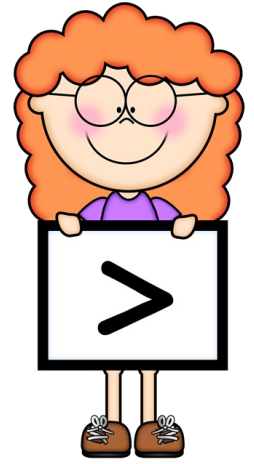
Display the Partner Game directions found on page 18 and point out the differences between the whole class directions and the partner game. After students play several rounds of the game with one set of cards, give them a blank set of cards and allow them to create their own decimal cards.



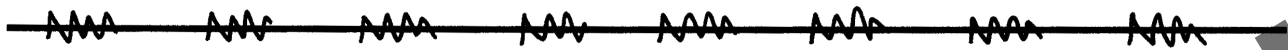


Comparing Decimals

Quick Check - Level A



Remember to compare the value in each place. Use the $<$, $>$, or $=$ symbol to show their relationship.



Examples

$$3.6 > 3.1$$

$$5.2 < 5.8$$

$$4 > 3.7$$

Your Turn!

Work Space

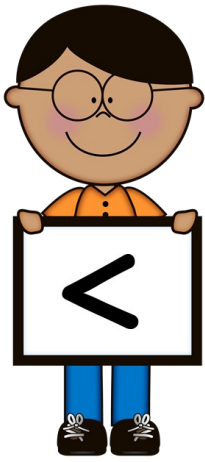
1) 4.2 4.8

2) 3.6 3

3) 5.7 5.2

4) 8 7.5

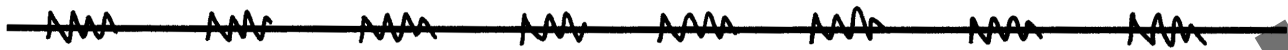
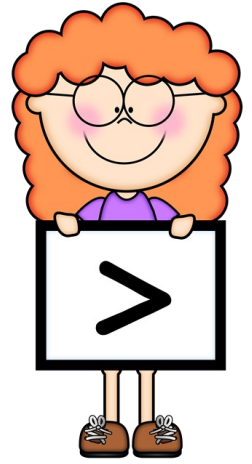
5) 4.1 2.9



Comparing Decimals

Quick Check - Level A

Answer Key



Examples

$3.6 > 3.1$

$5.2 < 5.8$

$4 > 3.7$

Your Turn! Answers

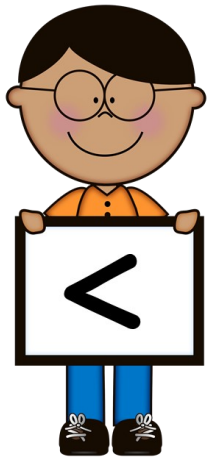
1) $4.2 < 4.8$

2) $3.6 > 3$

3) $5.2 < 5.7$

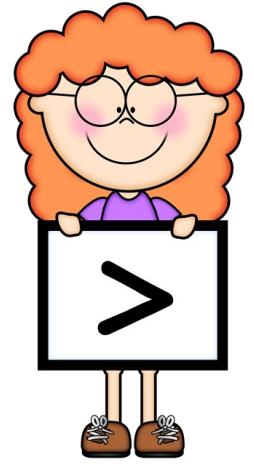
4) $8 > 7.5$

5) $2.9 < 4.1$

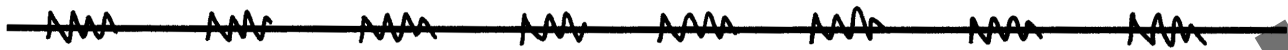


Comparing Decimals

Quick Check - Level B



Remember to compare the value in each place. Use the $<$, $>$, or $=$ symbol to show their relationship.



Examples

$$2.41 > 2.07$$

$$5.12 < 5.8$$

$$7 > 6.7$$

Your Turn!

Work Space

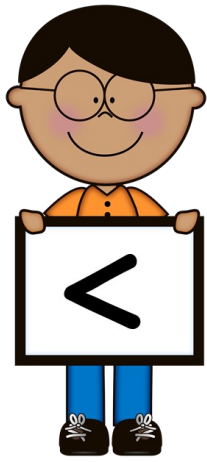
1) 9.27 9.08

2) 3.65 3.8

3) 5.7 5.26

4) 9 8.59

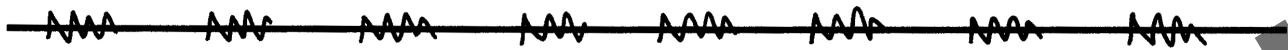
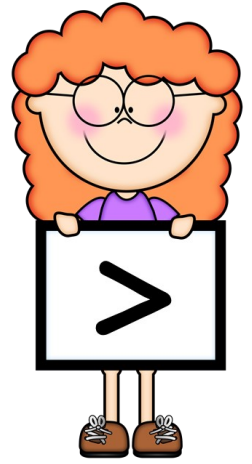
5) 2.9 2.90



Comparing Decimals

Quick Check - Level B

Answer Key



Examples

$$2.41 > 2.07$$

$$5.12 < 5.8$$

$$7 > 6.7$$

Your Turn! Answers

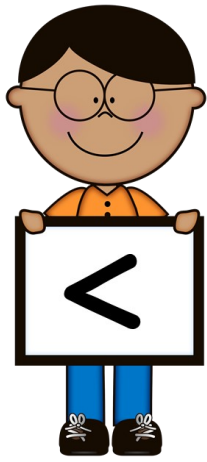
$$1) 9.27 > 9.08$$

$$2) 3.65 < 3.8$$

$$3) 5.7 > 5.26$$

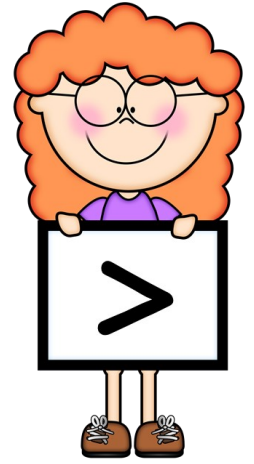
$$4) 9 > 8.59$$

$$5) 2.9 = 2.90$$

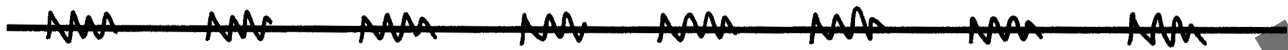


Comparing Decimals

Quick Check - Level C



Remember to compare the value in each place. Use the $<$, $>$, or $=$ symbol to show their relationship.



Examples

$$6.34 > 6.095$$

$$7.451 < 7.9$$

$$8 > 7.7$$

Your Turn!

Work Space

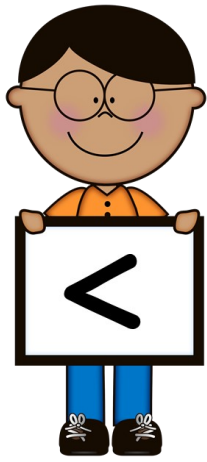
1) 2.173 2.8

2) 3.05 3.502

3) 4.7 4.700

4) 3 2.04

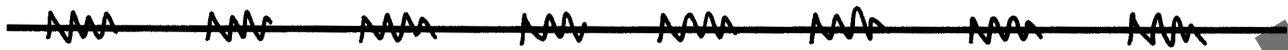
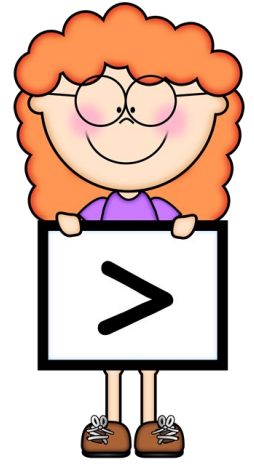
5) 7.092 7.86



Comparing Decimals

Quick Check - Level C

Answer Key



Examples

$$6.34 > 6.095$$

$$7.451 < 7.9$$

$$8 > 7.7$$

Your Turn!

Work Space

$$1) 2.173 < 2.8$$

$$2) 3.05 < 3.502$$

$$3) 4.7 = 4.700$$

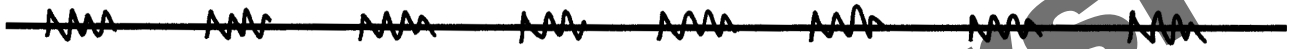
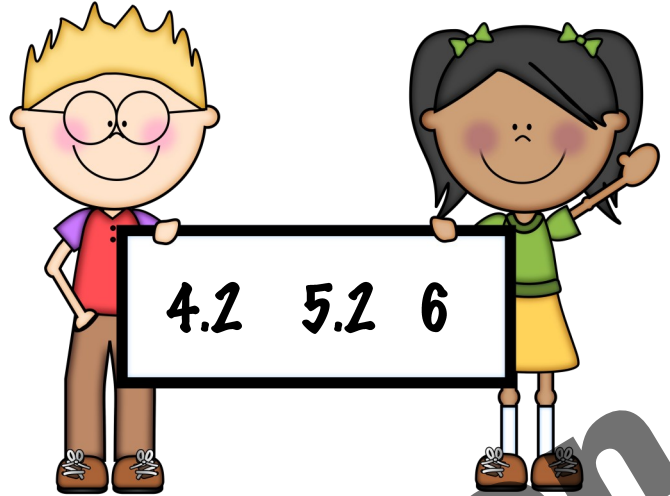
$$4) 3 > 2.04$$

$$5) 7.092 < 7.86$$

Ordering Decimals

Quick Check - Level A

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.



Examples

3.8 4.5 4.9  7 7.4 8.2 8.7

Your Turn!

1) 2.8 2.3 2

2) 5.2 5 6.4

3) 9.3 8.7 7.4

4) 6 5.2 5.8 6.3

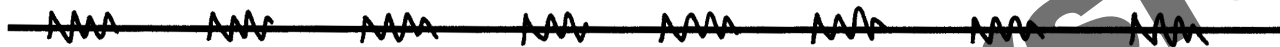
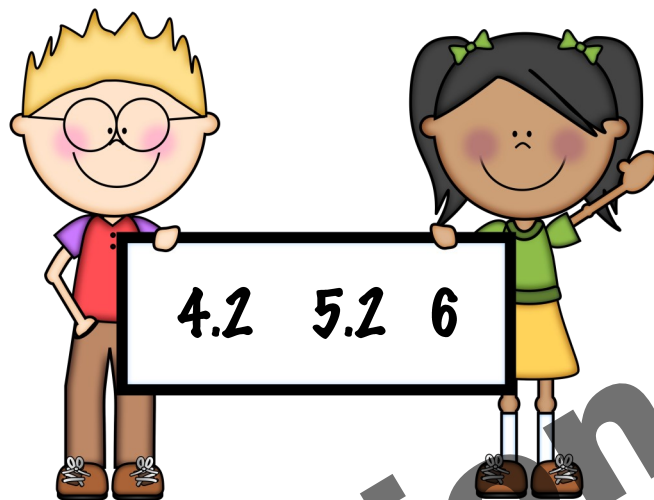
Work Space

Ordering Decimals

Quick Check - Level A

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.

Answer Key



Examples

3.8 4.5 4.9  7 7.4 8.2 8.7

Your Turn!

1) 2.8 2.3 2

2) 5.2 5 6.4

3) 9.3 8.7 7.4

4) 6 5.2 5.8 6.3

Work Space

2 2.3 2.8

5 5.2 6.4

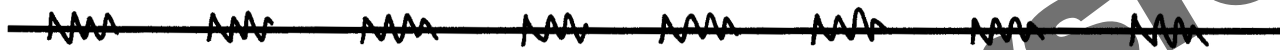
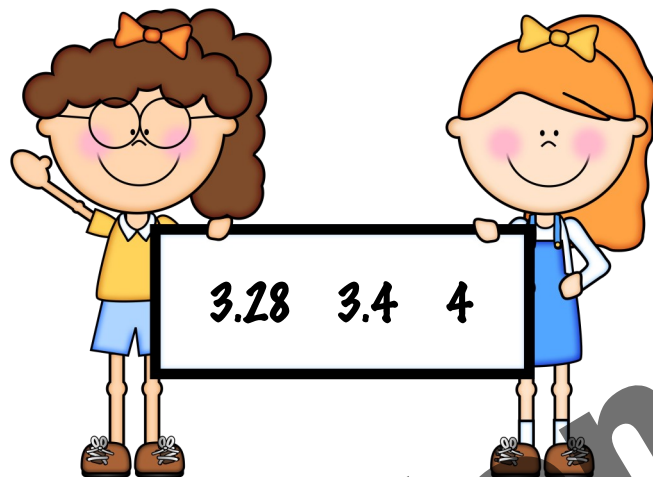
7.4 8.7 9.3

5.2 5.8 6 6.3

Ordering Decimals

Quick Check - Level B

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.



Examples

2.81 3.05 3.2  6.04 6.4 7 7.3

Your Turn!

1) 5.8 5.32 5.08

2) 7.23 7 7.9 6.02

3) 1.8 1.78 1.43

4) 4.9 4.65 3.81 3.02

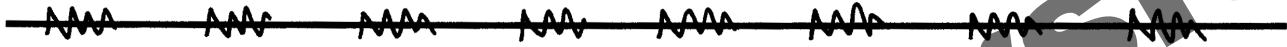
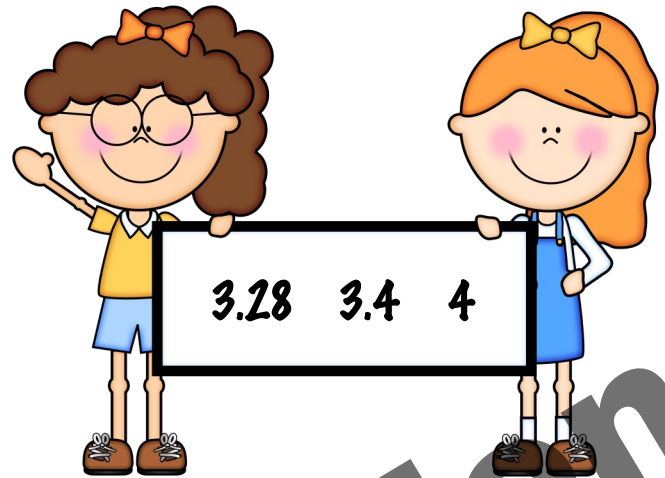
Work Space

Ordering Decimals

Quick Check - Level B

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.

Answer Key



Examples

2.81 3.05 3.2  6.04 6.4 7 7.3

Your Turn!

1) 5.8 5.32 5.08

2) 7.23 7 7.9 6.02

3) 1.8 1.78 1.43

4.9 4.65 3.81 3.02

Work Space

5.08 5.32 5.8

6.02 7 7.23 7.9

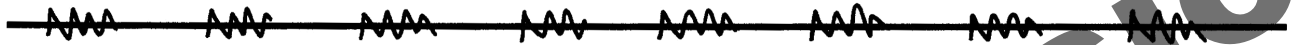
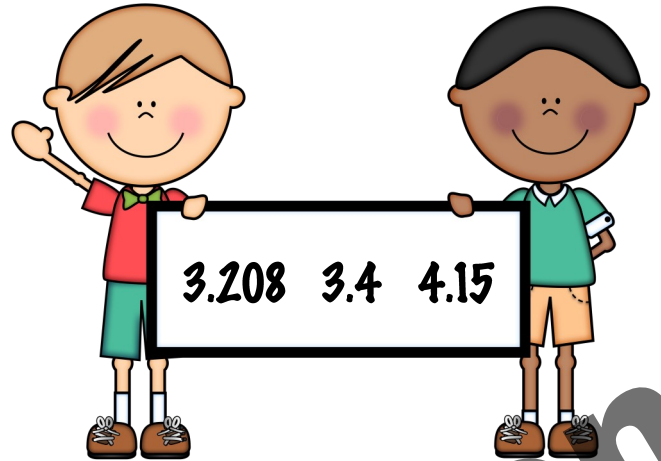
1.43 1.78 1.8

3.02 3.81 4.65

Ordering Decimals

Quick Check - Level C

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.



Examples

4.814 5.05 5.2  4.043 4.46 5 5.304

Your Turn!

1) 2.8 2.32 2.084

2) 6.13 6 7.928 7.026

3) 5.2 5.078 5.403 5

4) 3 2.605 2.91 3.09

5) 4.9 4.02 5.438 5.5

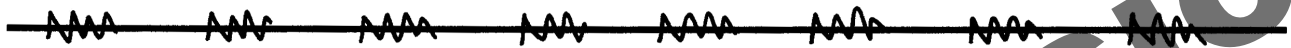
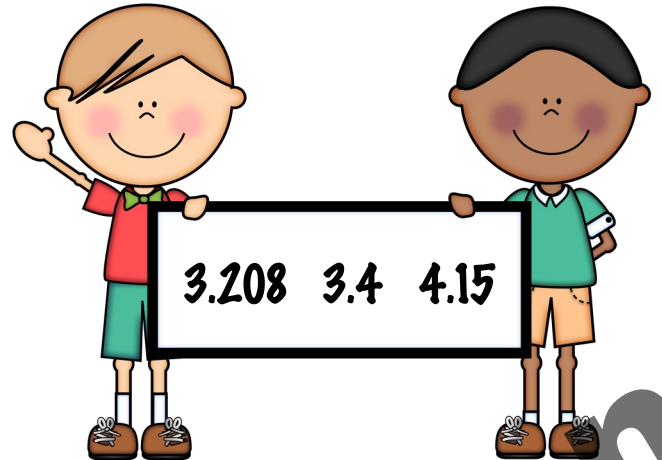
Work Space

Ordering Decimals

Quick Check - Level C

Start by comparing any two decimals. Place the smaller decimal on the left and the larger on the right. Then choose one of the remaining decimals, compare it to those two, and add it sequentially to the line up. Continue until all decimals are in order.

Answer Key



Examples

4.814 5.05 5.2  4.043 4.46 5 5.304

Your Turn!

1) 2.8 2.32 2.084

2) 6.13 6 7.928 7.026

3) 5.2 5.078 5.403 5

4) 3 2.605 2.91 3.09

5) 4.9 4.02 5.438 5.5

Work Space

2.084 2.32 2.8

6 6.13 7.026 7.928

5 5.078 5.2 5.403

2.605 2.91 3 3.09

4.02 4.9 5.438 5.5

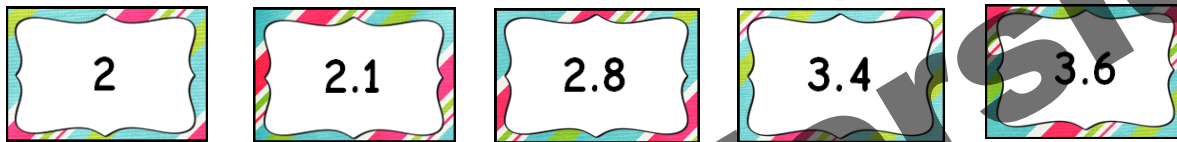
Capture the Decimals

Class Game Directions

Object: To capture the most players by correctly placing decimal cards in order.

Game Setup:

The teacher shuffles the decimal cards and places them face down in a pile. He or she chooses five students who each come forward and draw out a card. The five students hold up their cards and arrange themselves in a row facing the class with the smallest number on the left and the largest on the right.



How to Play:

1. The teacher chooses two students to become Player 1 and Player 2 and asks them to come to the front of the room.
2. Player 1 calls on a classmate to come forward and randomly draw a decimal card. Player 1 and the chosen student discuss the placement of the card in the line up. If the card can be placed sequentially between two adjacent cards, the student shows the class where the decimal should be placed and then says "Captured!" The two students holding the cards on either side are "captured;" both captured students and the student who drew the decimal card move to Player 1's side of the room and sit down.
3. If the card is smaller than the smallest decimal or larger than the largest one, the student who selected the card takes it to the end and stands where it belongs.
4. Next, Player 2 calls on a classmate who comes to the front, draws a card from the deck and repeats the same steps. If players are captured, they move to Player 2's side of the room where they stay until the end of the game.
5. Either player may challenge the placement of any decimal and may ask the other player to justify the placement of that card. If the challenger can prove that the placement was wrong, he or she captures the other player's card and the person who drew the card. All challenges must take place before a card is drawn for the next play.
6. The game ends when all students have been removed from the line up OR all cards have been played. The player with the most captured students wins!

Capture the Decimals

Partner Game Directions

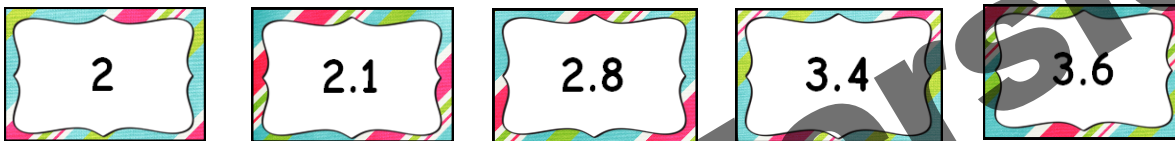
Objective

To capture the most decimal cards by correctly placing the decimals in sequential order.



Game Setup

Sit side by side. Shuffle the decimal cards and place the deck face down between you. Take the top five cards from the deck and place them face up to create the decimal line up. Work together to arrange the decimals in least to greatest order.



How to Play

1. The person wearing the most green is Player 1 for the first round. He or she begins the game by turning over the top decimal card. If the card can be placed between two adjacent cards in the decimal line up, Player 1 places it where it belongs and says "Captured!" He or she keeps the decimal card and the two adjacent cards that were captured. Player 1 then moves the three remaining cards on the decimal line up closer together.
2. If Player 1's decimal card is smaller than the smallest decimal or larger than the largest one, Player 1 places the card at either end of the line up where it belongs.
3. Player 2 turns over the next card in the deck and places it where it belongs in the line up. If the decimal can be correctly placed between two cards, the adjacent cards are captured and Player 2 keeps all three cards.
4. Players continue to take turns until all cards have been played or until all cards have been removed from the line up. If a player does not believe that a card has been placed properly, he or she may challenge the play or may ask the other player to explain the placement of the card. If the challenger can prove that the placement was wrong, he or she captures the other player's card. However, all challenges must take place before a card is drawn for the next play.
5. The player with the most cards at the end of the round wins.
6. Return all decimal cards to the deck, shuffle it, and place it face down between the players. Turn over the top five cards and arrange them in order to create the new decimal line up. The loser of the first round is Player 1 for the next round, and steps 1 through 5 are repeated.

Capture the Decimals Partner Cards Level A

2.3

3

3.4

2.1

3.1

3.8

3.3

2.8

3.7

2.6

2.9

2

3.5

3.6

4

Capture the Decimals Partner Cards Level A



Capture the Decimals Partner Cards Level B

2.4

3.04

2.08

2.2

3.8

2.64

2.12

3.2

3.25

3.48

2.75

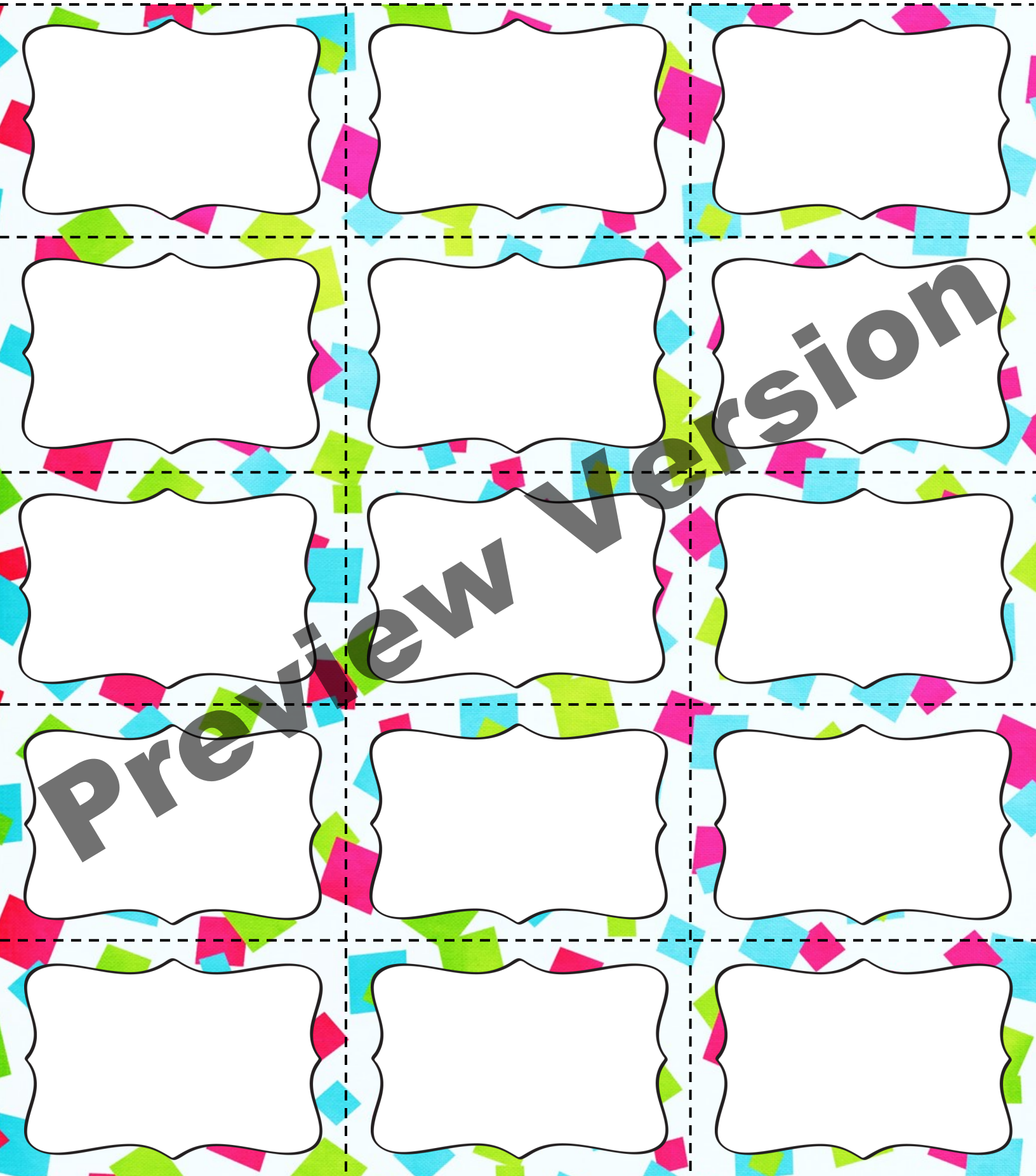
2.7

3.71

2.94

3.15

Capture the Decimals Partner Cards Level B



Capture the Decimals Partner Cards Level C

2.4

2.04

2.137

2.708

2.18

2.839

2.104

2.7

2.07

2.2

2.071

3.624

3.029

3.302

3.2

Capture the Decimals Partner Cards Level C



6.8

6.1

8.7

8.1

6

6.7

7.8

7.4

9

7.7

8.5

6.5

7.6

8.3

6.2

7.9

6.6

6.3

7

8.4

8

7.2

8.2

8.9

8.6

7.1

7.5

6.9



Preview Version

Preview Version

6.08

6.1

8.78

8.14

9

6.18

7.02

8.29

6.3

7.07

8.25

6.05

7.46

8.35

6.02

7.7

6.53

6.5

7.12

8.43

7.21

8.49

8

8.02

Preview

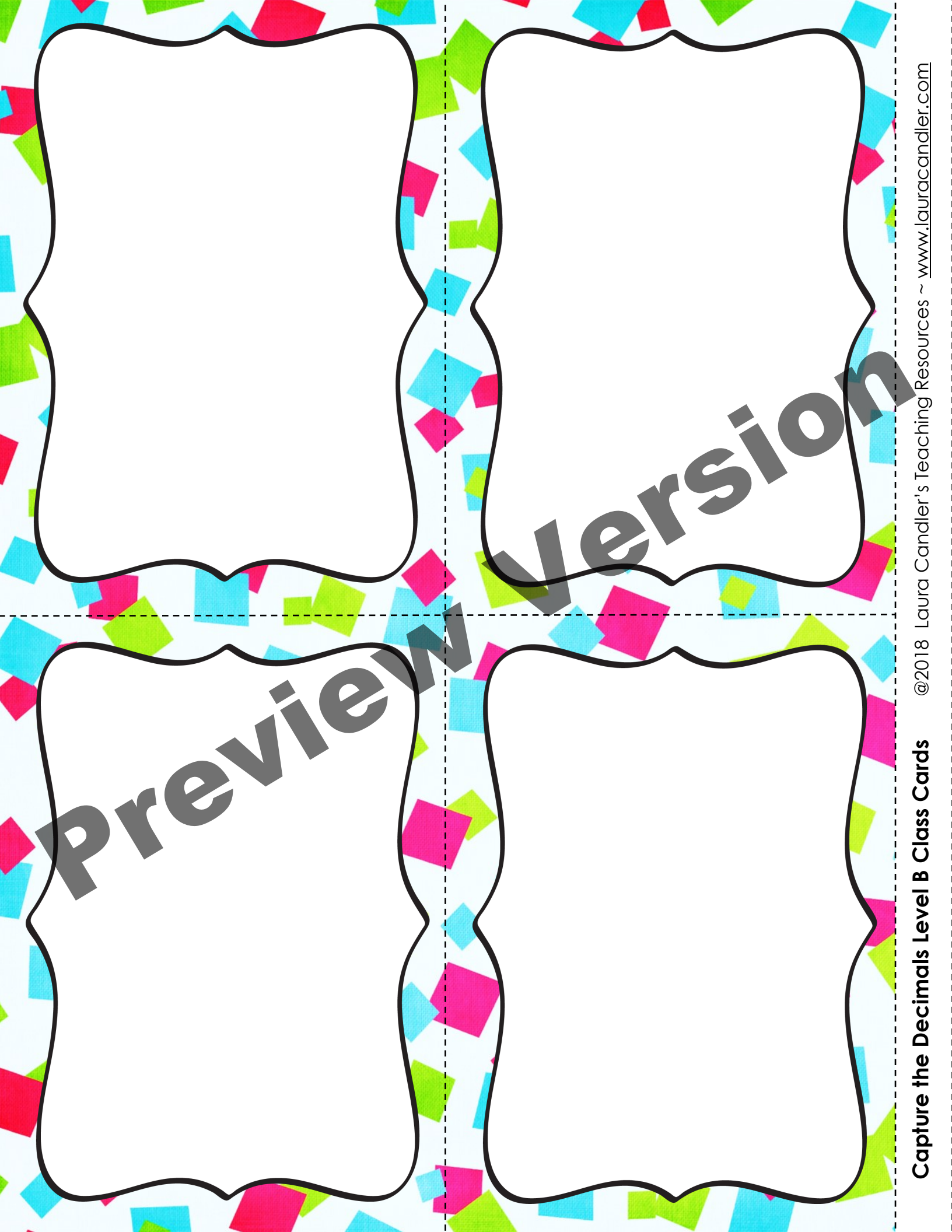
Version

7

7.53

8.20

8.46



Preview Version

6.8

6.13

8.708

8.04

9

6.18

7.839

8.104

Preview

Version

6.7

7.07

8.2

6.071

7.106

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6.02

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6.05

7.12

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Preview

8

7.21

8.02

8.4

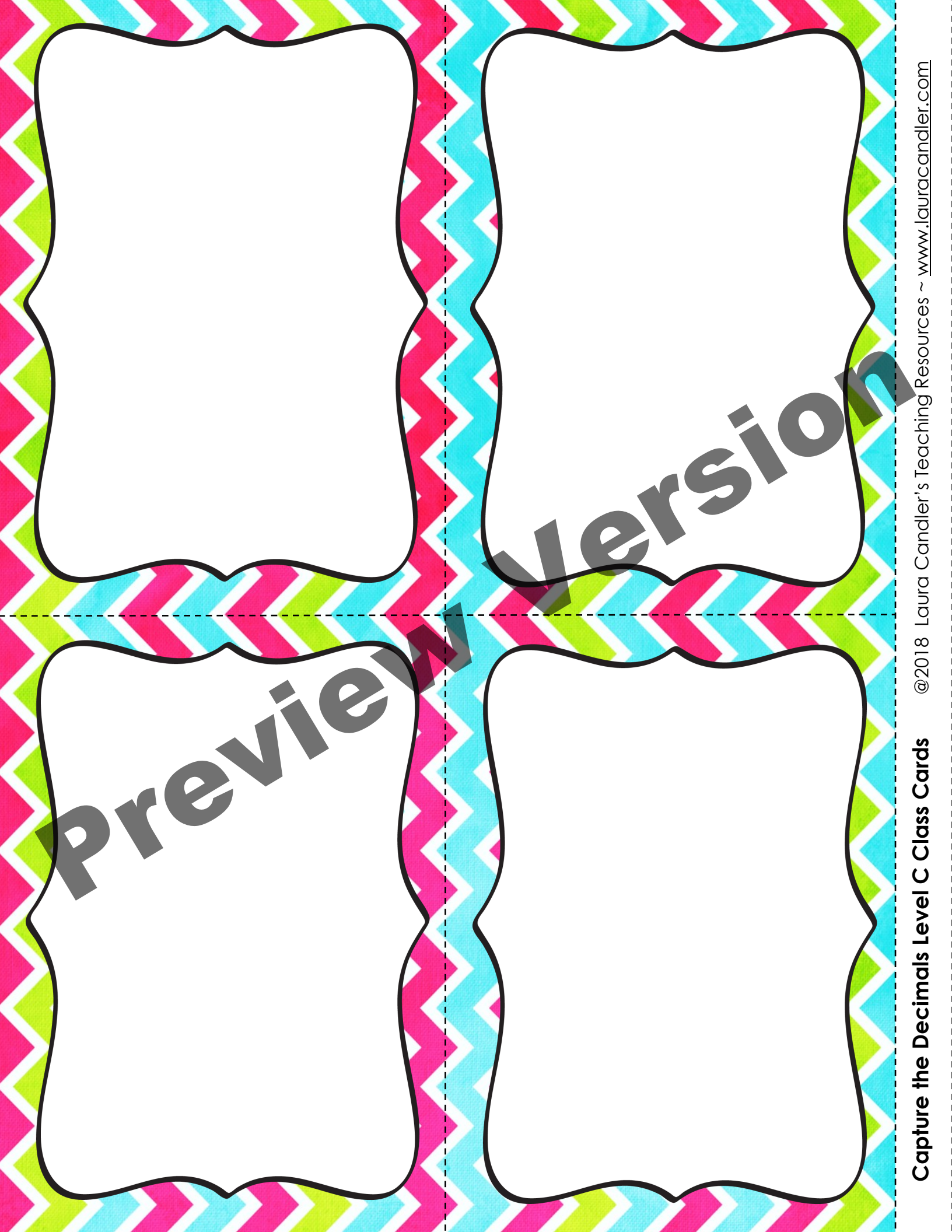
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8.20

7.1

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7.04



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Preview

Version