## Division Capture

## Object of the Game

Players take turns drawing a card with a number they can use to complete a division problem and capture a square on the record sheet. Players earn points based on how many squares they capture that make a row, column, or diagonal.

## Materials

- 1 set of Number Cards (2 cards each of numbers 1-10) Print the cards, use the 2-10 cards and the aces for 1 s from a deck of standard playing cards, or make your own cards.
- 1 Division Capture Record Sheet Print the record sheet or make your own. There are 4 different versions of the record sheet. Each one focuses on a different set of division facts.
- 2 crayons, markers, or colored pencils in different colors

- Game markers in two different colors or types of objects (optional) Using game markers to capture boxes on the record sheet makes it reusable. You can use dried beans, buttons, coins, paper scraps, small toys such as building blocks, etc.
- Multiplication Table (optional)


## Skills

This game helps us practice

- Dividing by 1-digit numbers and 10
- Recognizing multiplication and division facts
- Using the relationship between multiplication and division


## How to Play

1. Get ready to play:
" Agree on which record sheet to use. Each one focuses on different division facts.
» Players choose different colored pens, pencils, or crayons, or use game markers.
» Mix up the Number Cards and place them in a stack facedown.
» Each player draws one card. The player with the greater number is Player 1.
2. Player 1 draws a card from the deck. The player finds a division problem on the Division Capture Record Sheet whose answer is the number on the card. The player captures the square by writing their number in it or placing one of their game markers in it.

3. Player 2 takes a turn drawing a card and capturing a space on the record sheet.


Layla: There are two different squares
I could claim. They both have an answer of 6. I'm not sure which one I want.

Noelle: One of them would give you more points, so I hope you choose the other one.

Layla: Oh, I see it! I'll take $12 \div 2$ because that gives me 4 in a row!

What color do you think Layla is using?
4. Players continue to take turns until there are no more boxes left to capture.
» If there are no problems left whose answer matches the number drawn, the player must wait for their next turn.
» There will often be more than one problem with an answer that matches the number drawn. Players must think strategically to try to capture 3,4 , or 5 boxes in a row, column, or on the diagonal.

5. Players continue to take turns until the record sheet is filled or neither player can use the number drawn 3 times in a row.
6. At the end of the game, circle the places on the record sheet where you got 3,4 , or 5 in a row. If using game markers, point these out to your partner and agree before removing any game markers.

Points earned:
» 3 in a row earns 1 point.
» 4 in a row earns 2 points.
» 5 in a row earns 3 points.
7. Find your score by adding the points you earned. The player with the greater score wins.


Layla's strategic choice made her the winner!

## Tips for Families

- Talk about how to use a multiplication table to find solutions for division problems. For example, to find the solution for $18 \div 3$, find 18 in the same column as 3 . Then look at the number farthest on the left. That tells you that $3 \times 6=18$. So you know that $18 \div 3=6$.
- Think about how multiplication and division facts are related. Sometimes you can use a fact you know to find one you don't know. Watch for facts with answers shown on the record sheet that may help you solve another division problem.
- Watch for boxes that are more "valuable" to you as you play through the game. How do they change as you play?


## Change It Up

Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below. How did it change your strategy for winning the game?

- Try each record sheet. Each one involves dividing by two different numbers.
- Add two Wild Cards to your deck of cards. When you draw this card, you get to choose any number. How will this change your strategy?
- Make your own record sheet. Choose 10 division problems with answers from 1 to 10 that you want to include in the game. You and your opponent take turns writing a division problem in one square at a time. Keep adding division problems until all of the squares are full.

| Record Sheet 1 (twos and threes) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $21 \div 3$ | $8 \div 2$ | $3 \div 3$ | $18 \div 2$ | $12 \div 3$ | Scoring <br> 3 in a row $=1$ point <br> 4 in a row $=2$ points |
| $16 \div 2$ | $24 \div 3$ | $6 \div 2$ | $9 \div 3$ | $20 \div 2$ | 5 in a row $=3$ points |

## Record Sheet 2 (fours and fives)

| $25 \div 5$ | $36 \div 4$ | $30 \div 5$ | $28 \div 4$ | $12 \div 4$ | Scoring <br> 3 in a row $=1$ point <br> 4 in a row $=2$ points |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $35 \div 5$ | $5 \div 5$ | $16 \div 4$ | $32 \div 4$ | $50 \div 5$ | 5 in a row $=3$ points |


| Record Sheet 3 (sixes and sevens) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $21 \div 7$ | $36 \div 6$ | $7 \div 7$ | $48 \div 6$ | $18 \div 6$ | Scoring <br> 3 in a row $=1$ point <br> 4 in a row $=2$ points |
| $70 \div 7$ | $49 \div 7$ | $56 \div 7$ | $54 \div 6$ | $12 \div 6$ | 5 in a row $=3$ points |


| Record Sheet 4 (eights and nines) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $80 \div 8$ | $81 \div 9$ | $72 \div 9$ | $16 \div 8$ | $40 \div 8$ | Scoring <br> 3 in a row $=1$ point <br> 4 in a row $=2$ points |
| $18 \div 9$ | $9 \div 9$ | $24 \div 8$ | $32 \div 8$ | $63 \div 9$ | 5 in a row $=3$ points |


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## Multiplication Table

|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\mathbf{1}$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 0 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 0 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 0 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| $\mathbf{6}$ | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 0 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 0 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 0 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

