

# THE IMPORTANCE OF MATH FLUENCY

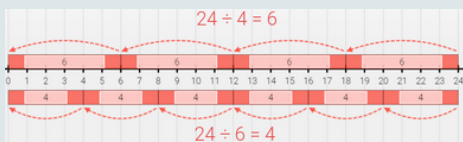
## DIVISION

Division helps us determine how many groups of things we need or how many things should be in each group.

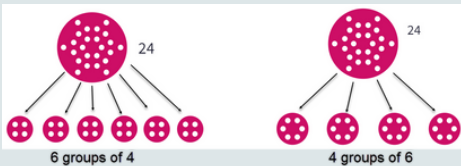
Fluency with multiplication can support your child with division.

### DIVISION REPRESENTATIONS $24 \div 6$ AND $24 \div 4$

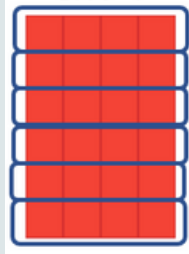
#### number line jumps



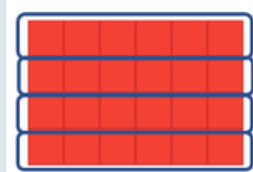
#### equal sized groups of



$$24 \div 6 = 4$$



$$24 \div 4 = 6$$



#### area model/arrays

#### skip counting

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

$$\begin{array}{l}
 \text{4 subtractions} \\
 24 - 6 - 6 - 6 - 6 = 0 \\
 24 - 4 - 4 - 4 - 4 - 4 - 4 = 0 \\
 \text{6 subtractions}
 \end{array}$$

#### repeated subtraction

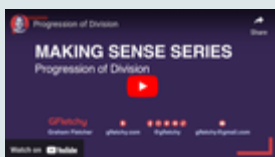
## FLUENCY WITH DIVISION

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

Students who only memorize facts miss out on developing the number sense and reasoning that is needed for working with larger numbers. There are patterns and relationships that exist in division facts. By exploring different strategies, patterns, and relationships, students build a foundation for fluency with division.

## THE PROGRESSION OF DIVISION

This [video](#) illustrates the progression of division from 2nd grade to the end of 6th grade.



## RESOURCES

[Math Flips](#), flashcards with visual models

This [video](#) can support you in helping your child develop and strengthen an understanding of division and the connection to multiplication.